SOCIAL CLASS, PEDAGOGY, AND ACHIEVEMENT IN ART

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Thesis presented for the degree of

DOCTOR OF PHILOSOPHY

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2005

ACKNOWLEDGEMENTS

A large number of people have helped and supported me in different ways in the carrying out of this research, and to whom I give grateful acknowledgement. To my main supervisor Professor Johan Muller, and supervisors Professors Tim Dunne and Paula Ensor for their highly insightful, intellectually rigorous, and committed supervision. To Professor Ana Morais for the inspiration of her own work, and helpful comments. To the fourteen teachers whose classes formed the focus of this study and without whom the research would not have been possible, for willingly opening their ideas and practices to investigation in depth, and generously granting hours of interviews and other invasions necessary for the research. To chief education specialist in curriculum planning and policy, Gill Cowan, for making the workings of the art education system visible, and graciously submitting to numerous exercises, repeat exercises, and interrogations for development of instruments for the research. To Associate Professor Owen Crankshaw and Anna Tietze for helping me to navigate the specialized fields of social structure and history of art teaching respectively. To Dr. Helena Viljoen and Jaqui Sommerville for statistical analyses. To senior subject advisors Leon Buchner and John Cowan, and senior administrators and teachers Gill Joubert and Liesl Hartmann, all in their capacity as moderators, for willingness to be interrogated at length about the workings of usually tacit processes of art evaluation. To Tracey Neville and Nerina de Villiers, for conducting special classes to create the art-works needed for research instruments. To Professor Neville Dubow for his ideas on value in art, and Professor Pippa Skotnes, Edwine Simon, Denise Penfold, Allan Raaff, Dick Ward and Marianne Bester, for sharing their perspectives on the evaluation of art for entrance to tertiary level institutions. To Jean Baxen, Dr. Heather Jacklin, Dave Gilmour, and Associate Professors Kevin Rochford and Rob Sieborger, for guiding conversations at the start and various stages of the research. To Andrew Putter, Cheryl Reeves, Monica Mawoyo and Ursula Hoadley, for numerous discussions on work in progress, and testing the reliability of my coding schemes. To the Principals of schools at which my selected teachers practiced, for interviews and facilitating easy access to all information required. To Hilary Buchanan for assistance with diagrams and layout. To Gonzalo Aguilar, Marian Green, Ingrid Thom, John Valentine, Lance Macleod and Chris Kleinsmith for different types of technical support. To Janine van Ryn, Val Kiewitz and especially Beryl Naidoo of Copywrite, for assistance with photocopying and meeting my repeated impatience with friendliness. To Nomvuyo Mande, for relieving me of my domestic work. To Professor Ben Turok, M.P., for the inspiration to do socially engaged research. To Professor Crain Soudien, for his faith in my project. To Professor Kevin Wall, whose example, encouragement, and insistence on "focus" played no small role in bringing the research to conclusion. To all my friends, especially Josie Yende-Mthethwa, Hazel Anderson, Donve Langhan, Gillian Matthews, Cathy Lubner, and Tim Douglas for their warm moral support. To my parents Cathleen and Ivan Gresele, and sister Ingrid Norris, for always being present and giving when I could not be or do. To my immediate family, Professor John, and Joseph and Samuel Bolton, for their patience, loyalty, and unconditional generosity and support for the better part of the six years in which this research was undertaken – I salute you!

The generous funding of this research by the Spencer Foundation is hereby acknowledged. Opinions expressed and conclusions arrived at are those of the author and should not be attributed to the Spencer Foundation.

ABSTRACT

This thesis explores pedagogy associated with high levels of achievement in art in the final year of secondary school, by learners in different social positions. It investigates first, achievement patterns in final-exhibition percentage grades, in relation to learners' social class, race, and gender. Second, based on comparison of high and lower-achieving school classes of socially similar learners, it examines specific pedagogic features linked to success in particular social contexts.

The research asks whether or not specific pedagogic features are associated with achievement in art for learners in particular social positions, and if so, whether these are similar to pedagogic features linked to success in science. It combines different methods to address these questions: a survey to identify art achievement patterns in relation to learners' social class, race and gender, and a multiple case study for detailed exploration of pedagogy and curriculum linked to performance in art, in six school classes. Finding achievement patterned more strongly in relation to social class than race or gender, analysis focuses on social class and achievement.

Addressing the research questions necessitated definition of 'achievement in art'. The existence and nature of shared criteria was explored through interviews with teachers, and other evaluators, and an evaluation-task administered to these individuals. Results of this exploration showed that although judgement of quality was not uniform across individuals, judgements were broadly similar and traceable to traditions within the discipline. Learners' achievement was measured in terms of their ability to recognise and realise (produce) shared criteria.

Bernstein's theories of pedagogic code and in particular the concepts of classification and framing were used to analyse and code pedagogy, and relate learners' achievements, as represented by their percentage grades and recognition scores; their social class; and specific pedagogic features experienced.

The research found that achievement of high percentage grades in art by all learners was linked to experience of complex processes, explication of shared criteria, and

features thought to facilitate the latter clarity. These features included provision of exemplars of consecrated art, mainly through classroom displays, and teacher selection of projects and sources of reference. Other features comprised open communication relations and the inter-mingling of teacher-learner spaces needed for dialogue. Further features linked to success were strong teacher-control of micro-level sequencing of stages within processes, thought to 'scaffold' learners towards achievement of criteria, and learner selection of components within projects, thought to promote engagement with work.

Control of some features differed for successful learners in differing social positions: the regulative elements of initiation of dialogue, work-focus and sound levels were strongly teacher-controlled and businesslike in high-achieving classes of upper middle-class learners, and more 'relaxed' for their successful lower middle-class counterparts.

Pedagogic features linked to success in art were similar to those associated with achievement in science, key differences being strong teacher-control of micro-level sequencing of sub-components of projects/processes and sources of reference for all learners; and very weak classification of both learner spaces and individuals, and weak control of all observed aspects of regulative discourse in socially disadvantaged contexts.

The main theoretical contribution of the research lies in its fine-grained delineation of pedagogic practice in a theoretically systematic way. This categorization shows that while constructs such as 'code', 'power' and 'control' enable systematic analysis and comparison of features across a wide range of contexts, they need not in themselves, given the demonstrated different ways in which they have been operationalised, pre-determine the character of data.

A further theoretical contribution of the study lies in the discovery, in analysis of regulative discourse, of different types of 'positional comment', made from the vantage points of different social positions.

DECLARATION

I declare that *Social Class, Pedagogy, and Achievement in Art* is my own work, except where indicated, and that it has not been submitted before for any degree or examination at any university.

Signed:

signature removed

Heidi Bolton
2005

The practical findings of the research, suggesting first, that teachers can selectively tighten or relinquish control of pedagogic features for accomplishment of curricular goals by socially specific learners, have implications for teacher training. The second finding with practical implications is the existence of patterns, if broad, in judgments of texts in a field in which several traditions jostle for dominance. This has implications for curricula in art and other knowledge fields with multiple paradigms, pointing to the need for explication of shared criteria in curriculum documents and pedagogic practice.

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CHAPTER 1

INTRODUCTION

The research documented in this thesis is a sociological investigation of pedagogy associated with achievement in art by learners in their final year of secondary school in a South Western region of South Africa[1]. Its particular focus is on pedagogy associated with high levels of achievement by learners across a range of social class contexts.

The research explores broad patterns in art achievement in relation to learners' social class, race, and gender, limiting detailed analysis to relations between learner performance, pedagogy, and the contextual feature of social class[2]. Detailed study is made of six school classes, each school class having been selected on the basis of the achievements and social class of learners within them. The six classes are paired for comparison, those in each couplet similar with respect to social class but achieving at different levels. An attempt is made by comparing pedagogy in these classrooms, to isolate specific pedagogic features linked to high levels of achievement for learners across all social class groups and to success for those in socially disadvantaged positions in particular.

Since art is a loosely bounded discipline where curricula are created at classroom level by teachers and for which evaluation criteria are not specified in official syllabi (see for example Western Cape Education Department 1995), part of the research involves delineating a concept of achievement in art. While there is a tendency for individual art teachers to create curricula, assessment of learners' final exhibitions in the researched context is communal, each display being evaluated by teachers, external examiners, and a moderator responsible for assuring fairness in grading across schools. Defining achievement in the context investigated necessitated interviews with teachers and other evaluators to ascertain sought-after criteria.

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1 The twelfth and final year of formal schooling in South Africa is known as 'matriculation' or 'matric'

2 Social class being the contextual feature most strongly linked to achievement (see Chapter 3, Section 3.6.2)

The study in focusing on pedagogy in art classrooms addresses a lack expressed in the literature, of research into teaching in South African classrooms (see for example Seekings 2000; Anderson, Case and Lam 2001), detail on good practice in art classrooms (Burton 2004), and effective art curricula (Erickson 2004). Coding used to categorise pedagogy and analytical procedures employed to relate social class, pedagogic features and achievement levels has relevance for education research in general. Processes used to map the workings of artistic judgment may be useful for delineating the mechanics of judgment in any weakly bounded form of knowledge.

In this introduction I provide a rationale for the study, presenting my reasons for embarking on it and choice of the research design. I give a brief sketch of the methodology used, and position the research in the South African education system. I close the chapter with an outline of the structure of the thesis.

1.1. Rationale and origins of the research

This doctoral research has three points of origin. Literature on patterns in learner performance in relation to their social class plays a large role in the conception of the study. On one hand, it is clear from the literature that social class has affected not only learners' achievement levels but also curricula available to them. On the other hand experience leads me to the conviction that classroom teaching can make a difference to the achievements of any learners. In much literature on teaching style or instructional methods however, there is scant mention of the social context of learners: learners are homogenized as 'learners'.

A cluster of Portuguese studies (see for example Domingos 1987; Morais et al 1992 and 1995; Morais and Camara 1997; Morais and Neves 1997; Morais and Rocha 1997; Morais 1998) proves an exception to the rule. In these studies relations between learners' acquisition of various knowledge- and behaviour-related competences, a range of contextual features (socio-economic status, race, and gender), and pedagogy are explored. These studies have inspired the present research.

Of particular interest to the current study is research investigating the relation between pedagogy, social class, and learners' acquisition of complex cognitive competences in

science (Domingos 1987; Morais et al 1992; Morais et al 1995). In these studies, specific aspects in the pedagogic process are shown to be associated with high levels of achievement in science for all learners, and for learners in lower social class positions in particular. Certain pedagogic features are found to not only raise the achievement levels of learners in particular social positions, but specific aspects of pedagogy are also shown to lower differential achievement between the different social class groups (see Morais et al 1995). In this literature it is pointed out that further research is needed to ascertain whether, and the degree to which pedagogic features associated with achievement in science are similarly linked to success in disciplinary areas other than science, and whether and the extent to which this is the case for learners across different racial-ethnic groups and in countries other than Portugal. I decided to investigate whether or not specific pedagogic features linked to success in science for Portuguese learners are linked to achievement in *art* in South Africa for learners in various race groups and occupying a range of social class positions.

Specific pedagogic features for science teaching have been relatively clearly specified (Morais 2002a). One of the tasks of the present study is to ascertain whether these features can be adopted or adapted for investigation of art pedagogy, or whether delineation of new features is required. Given differences between art and science as forms of knowledge it is expected that the pedagogising of these disciplines will differ (see Chapter 5). A further implication of the difference between the two knowledge forms is that what constitutes achievement, while relatively easy to define in science, cannot be assumed and needs to be explored and delineated for art. A fairly large component of the current research is thus devoted to description of achievement in art in the region studied (see Chapter 4).

The importance of social justice in current South African education policy[3] and in its own right comprises a second source of origin for the present research. Although positions on what constitutes an agenda for social justice may vary (Muller 1997),

[3] Values in the 'Senior Phase' policy document (Department of Education 1997) for the seventh to ninth years of formal schooling influenced the current research. It was expected that values in this document, being part of the reform of the education system, would be identical to those underpinning policy for the 'Further Education and Training' phase within which guidance for the twelfth year of schooling was situated and which was still in the process of being compiled when the present research took place.

universal access to educational opportunity and specialized knowledge arguably comprises part of this agenda. Historically, the South African education system with its separate policies for different racial groups perpetuated social division with respect to race, but also with respect to social class, gender and ethnicity (Department of Education 1997: 1). Curriculum reform instituted in post-1994 democratic South Africa seeks to provide equal opportunities across the board. The senior phase policy document in use at the time of the current research states that:

> "... it is important that the state's resources be deployed according to the principle of equity, so that they are used to provide essentially the same quality of learning opportunity for all citizens. The improvement of the quality of education and training services across the board is essential" (Department of Education 1997: 1).

The arts and culture section of the policy document (Department of Education 1997: AC 3), referring to arts education historically and the impact of past policy on current arts education, states that:

> "... Unequal resourcing and provision of Arts and Culture Education and Training contributed to entrenched social divisions, promoting access to knowledge and skills and career opportunities for a select minority. Presently the vast majority of South African learners remain deprived of the meaningful experiences and opportunities afforded by Arts and Culture Education and Training ..."

The policy document (Department of Education 1997: AC 2) states that current arts and culture education and training is underpinned by "equal access to resources and redress of imbalances", redress being a principle underlying the whole of the arts curriculum (Ibid. 4). Further, redress is described as involving equal opportunities for "creative growth and development" such that access is facilitated for all learners, to "the world of work and arts-related industries" as well as to personal growth (Ibid. 1). Observation suggests that this is not currently the case: final-year learners appear unevenly prepared for entry to post-school art courses, although a large proportion – roughly half – have expressed intentions of pursuing art-related careers.

If access to resources is to be ascertained or measured in a meaningful way, prior knowledge of the significance of particular resources is required. Consideration of

South African research in which factors linked to learner performance are explored is useful for sketching the importance of various resources – resources being physical (such as buildings, equipment and supplies), as well as symbolic, including effective school management and teaching.

While some school-contextual resources such as the condition of school buildings and presence of electricity and water have been found to account for less than 1% of variation in performance (Perry 2002, as reported by Taylor et al 2003), it has been suggested that other features such as basic teaching resources and managerial efficiency are important for learner achievement (Crouch and Mabogoane 2001; Van der Berg and Burger 2003).

A study running regressions against the five teaching-related resources of pupil-teacher ratios, teacher experience, teacher training, and learning materials to ascertain the relative importance of each for differential performance in socially similar schools (Vinjevold and Crouch 2001, reported in Taylor et al 2001) found that these factors account for only 10% of variation in learner achievement. Teacher qualifications have elsewhere however been shown to be significant for mathematical performance, and "pupil-teacher ratio" and teacher age for general performance (Van der Berg and Burger 2003). Further, internationally the effects of educational processes on learner achievement have been shown to be greater in developing than in developed countries (Teddlie and Reynolds 2000: 239; Scheerens in Taylor et al 2003: 63). These findings parallel earlier findings that teaching is more significant within developed countries, for minority than majority students (Coleman 1966: 22).

Noting the support in the international literature, for the relation between teaching-related factors and high levels of learner performance, especially in developing countries and for minority learners, I argue for the importance of pedagogy in addressing educational imbalances, and facilitating access to knowledge and the arts-related world of work beyond school. Further, in South Africa there is little research into the relationship between the pedagogic process and learner performance.

A third source of origin for the present research is my observation as a previously practicing teacher that pedagogy *appears* to make a difference to learner achievement.

Several observations attest to pedagogic effects. At some schools for example, it appears that whole classes have similarly high levels of skill, while in other contexts there is a range of levels of competence. I have noticed that more sophisticated skills are demonstrated in privileged than in disadvantaged school classes, and that artworks in some lower middle-class classrooms do not fit this pattern. Further, the appearance of artworks differs observably *across* art classes while it is often the case that there are recognizable styles or characteristics *within* classrooms. It seems unfair to describe learners as 'untalented' when they display lack of what appears to be teachable skill.

In light firstly, of the importance of social justice and the potential role of pedagogy in meeting this objective and secondly, links in the literature between pedagogy and achievement, and lack of research into the pedagogic process in South Africa, I decided to explore in detail, the act of teaching. I examine pedagogy in secondary school classes across a range of socio-economic contexts, including teaching and learning in classes displaying relatively uniform skill levels and those showing varying degrees of competence, and classes achieving at high and lower levels. I am interested in pedagogic features associated with high overall achievement levels in art for socially particular learners, the research question being:

> What, if any, are the specific pedagogic features associated with achievement in matric[4] art by learners in general, and socially disadvantaged learners in particular?

Various methods have been used to address this question.

1.2. Design and methodology

Addressing the research question required three major undertakings. The largest of these tasks was the characterization of pedagogy in a systematic way. The idea was to categorize pedagogy sufficiently generally to facilitate comparison across observed classrooms, and also comparison of observed pedagogy and that categorized in the literature. At the same time the intention was to capture all detail in observed

[4] Matric art constitutes art produced for exhibitions learners are required to display for their final art gradings at the end of the twelfth 'matriculation' year of secondary school.

contexts, since the significance of particular aspects of pedagogy was not known at the start of the study.

The second task needed to answer the research question was delineation of the concept of achievement in art. Despite a commonly held perception that achievement in art cannot be measured, art has always been and continues to be evaluated in both educational and beyond-education-institution public and private display contexts. Sought-after criteria have however traditionally been and remain tacit, and defining achievement necessitated ascertaining the existence and nature of common criteria in the researched context. Criteria were accessed through interviews with school art evaluators, and a task constructed with the purpose of mapping artistic judgments across evaluators. The intention was to measure learners' achievement using both their percentage grades and the extent to which their judgments matched those of their evaluators.

Third, addressing the research question required description of learners' social contexts. I made an initial decision, based on general current practice, to consider learners' social class, race, and gender. It was necessary to accumulate information regarding these demographic features in a systematic way. Gender categorization was straight-forward, and that of race superficially based on teachers' perceptions. Characterisation of social class, being more complex and expected from the literature to play a significant role in learners' achievement, was theorized.

I accumulated data in a range of ways aiming for both breadth and depth, and complementing direct with indirect methods. I used the direct methods of classroom observation and the making of fieldnotes and audio-recordings for gathering data to characterize pedagogy. I supplemented these strategies with teacher interviews to capture non-observable aspects of pedagogy or those occurring prior to my observation-period. I attempted to obtain a relatively objective measure of learners' performance in practical art-making, one assigned by a team of evaluators rather than a single individual namely, the indirect measure of learners' percentage grades awarded for final exhibition displays. I complemented this with a direct measure of performance in the form of learners' artistic judgments as displayed in responses to a task I constructed and administered for the purpose. I collected information on

learners' social class and gender with a survey questionnaire, and in an attempt to close gaps in incomplete or inconsistent responses thus acquired, conducted direct follow-up interviews with each learner. I assigned learners a racial categorization indirectly, based on teachers' estimates of how individuals would have been classified during South Africa's race-based political regime.

I characterize pedagogy (see Chapter 5) in terms of 27 pedagogic features, developing these categorical features using Bernstein's (1971; 1975a; 1975b; 1981; 1990; 1996; 2000b) theory of pedagogy and the data itself, and adopting or adapting categories used in other Bernstein-based research. Bernstein's theory is useful for the capturing of detail and systematic description of these details in generalized categorical terms. I categorize learners' achievement in terms generated by the data, the latter comprising learners' percentage grades and artistic judgments (see Chapter 4). I use Wright's (1997) typology of social class relations to characterize learners' social class on the basis of their parents' or caregivers' occupational skill and authority levels, and ownership of capital (see Chapter 3). Wright's theory provides a highly systematic explanatory tool for description of class.

There are two phases of analysis, each related to a component of the research design described below. The first phase of analysis focuses on patterns between the final art percentage grades, and range of contextual features, namely, social class, race and gender of art learners in 14 schools (see Chapter 3). Although contextual and achievement-related information was collected from individuals, data are aggregated for this analysis. The mean grades of different social class, race and gender groups are considered to ascertain whether or not achievement is patterned according to these features. This phase of analysis also includes comparison of the mean grades of learners in socially similar school classes, to ascertain the degree of variation in performance of these learners.

The second round of analyses focuses on six of the fourteen classes used in the first set of analyses, considering relations between the 27 categorised pedagogic features and achievements of learners in particular social class positions (see Chapter 6), social class having emerged in the first round of analyses as the contextual feature most strongly linked to achievement (see Chapter 3, Section 3.6.2). The intention is to

explore pedagogic features linked to high levels of achievement for learners in different social positions. Conceptually ordered matrices are used for this part of the analysis.

There are two distinct but related parts to the research design, both parts having been carried out over the same time period (see Figure 1). The first 'quantitative' part of the research is a survey administered to art learners at 14 schools for the gathering of social class, race and gender information in relation to which final percentage grades are considered. This part of the research was necessary to facilitate selection of the sample for detailed study. Although the sample for detailed study was selected on the basis of findings after one round of the survey, questionnaires were administered to four cohorts of final-year art learners over four consecutive years, for post-hoc confirmation of patterns found in the initial year.

The second part of the research is a qualitative multiple case study of pedagogy and achievement in six of the initial 14 school classes surveyed. The classes are grouped into three pairs, one class in each couplet having achieved at significantly higher levels than the other over the four years of the research. In grouping classes an effort was made to control for contextual features shown in the first part of the study to be linked with learner performance. Since social class was the feature most strongly linked to achievement, care was taken to ensure that social class was similar within and differing across pairs of school classes in a roughly consistent way over the four years of the study. Because there was also a link between learners' race and their performance, albeit a weaker association than that between social class and achievement, efforts were made to ensure that paired classes were roughly similar with respect to race.

Pairs of classes have 'high', 'middling' and 'low' social class respectively. The 'high' social class school classes have more 'white' learners than the other classes, and all of the other school classes, mostly 'coloured'[5] learners. I refer for convenience in discussion, and to reflect the stronger association of social class with achievement, to

[5] The designation of 'coloured' in apartheid South Africa drew on a complex social construction comprising a mix of cultural and genetic features and could be crudely described as referring to 'mixed race'

'social class' rather than 'social class and race'. I explore relations between pedagogy, social class, and learners' achievements using conceptually ordered matrices to investigate patterns in the following (see Chapter 6):

- Pedagogic features similar within all high-achieving school classes and differing between high- and low-achieving classes, this matrix being useful for identifying features associated with high levels of achievement for all learners

- Pedagogic features similar within and differing between the 'high', 'middling' and 'low' social class groups, this matrix being useful for identifying features associated with social class and not achievement

- Pedagogic features varying with social class within the high-achieving group of school classes, this matrix being useful for identifying features linked to achievement for particular social class groups

- Pedagogic features varying across high- and low-achieving groups within the social class groups, this matrix being useful for identifying features associated with achievement but less strongly so than other aspects already found

The research design was shaped by the 'Interim Syllabus for Art, Standards 8 – 20' (Western Cape Education Department 1995) in use for the duration of the present study.

1.3. Art at secondary school in South Africa

Prior to the onset of democratic government in South Africa in 1994, schools designated for different racial groups offered different curricula and in the main only those for 'white' learners offered art, others doing so being exceptions. In the post-1994 unified education system art is offered at senior secondary level mainly in schools previously offering it. Although these schools have become racially integrated to differing degrees, they nevertheless remain relatively privileged in relation to South African schools on the whole. However, variation in resources at the schools studied

differ observably: total annual book budgets for libraries and those for art materials, for example, vary between over eight- and under one thousand rand. Upper middle class schools have over 500 art books available for use by learners, while more disadvantaged institutions have fewer than 100.

The 'Interim Syllabus for Art' (Western Cape Education Department 1995) is brief. It is made up of two sections: history of art and practical work. The focus of the current study is on the teaching and learning of practical art making for two reasons. First, all learners taking art as a secondary school subject do its practical component, and very few do history of art. Secondly, entry to tertiary level art courses is based on tertiary-institution assessment of portfolios of practical work.

The secondary school practical art syllabus in use at the time of the research has twelve specializations: painting, graphic art, sculpture, photography, ceramics, textiles, fibre arts, jewellery, puppetry, communication/information design, industrial design, and art documentation (Western Cape Education Department 1995). Most secondary schools have a single art teacher teaching a single practical specialization, usually painting, and learners are obliged to enrol for the particular course on offer at the school. Practical course content is broadly specified in the syllabus (ibid.) as follows:

1. Use of a variety of media and techniques with drawing as a basis
2. Exploration of a variety of topics: subjective, objective, decorative, historical, mythological, imaginative
3. Analysis and interpretation of objects
4. Exploration, transformation, and abstraction of forms
5. Experience of critical analysis
6. Development of technical, formal, and conceptual skills which may enhance vocational possibilities.

Teachers create various curricula in response to this content. All evaluation of art is internal to schools until the end of the final, twelfth year. Learners' final exhibitions are graded by the teacher, two external examiners, and a moderator who ensures comparable standards across schools. Moderators, accompanied by the teachers

concerned, consider each exhibition and the three grades awarded it, and with or without comment or discussion, arrive at a final grade. Moderators' grades count as learners' final practical art grades.

The absence of explicit criteria in the syllabus and evaluation procedures opens the way for individual interpretation. Whether, and to what degree this is avoidable, is a sub-question the present research seeks to answer.

1.4. Outline of the thesis

In the chapter following this introduction I locate the present research in literature focusing on factors associated with learners' achievement. I refer to debates on the relative importance of contextual features and pedagogy for achievement, and general acknowledgement of the over-riding significance of the former for success, although differential performance of socially similar schools has been noted. I draw on research into school-level factors impacting on learning in South Africa to show that although teaching resources, managerial efficiency, and language are important for learners' success, variation in achievement across socially similar schools remains partly unexplained. I hypothesize that specific pedagogic features may affect all learners' success.

I note that teaching style literature, while showing that pedagogy consisting of a mix of teacher- and learner-centred elements is associated with achievement, does not take learners' social contexts into account, assuming that pedagogy affects learners similarly. I locate the current investigation in a specific cluster of studies exploring relations between achievement (in science), pedagogy *and* contextual factors – in Portugal – explaining why I focus on the disciplinary specialization of art in South Africa with an intention to contribute to the Portuguese body of work.

Chapter 2 outlines conceptual frameworks underpinning the study. The centre of interest in the research, analysis of pedagogy, is underpinned by Bernstein's (1971; 1975a; 1981; 1975b; 1995; 1996; 2000b) theory of pedagogic code. Relevant concepts and criticisms of these ideas are discussed in detail. Other theorized aspects of the research are also described: use of Wright's (1997) typology of locations within class

relations together with Bourdieu's (1983; 1984) notion of cultural and educational capital for definition of learners' social class; and Bernstein's (1996; 1999; 2000a; 2000b) theory of knowledge structures to explain variation in sought-after art criteria, and differences in aesthetic judgments across contexts.

Chapter 3 sets out the two-part research design, presenting a rationale for the combination of methods used, and dealing with limitations of methods and attempts made to address these shortcomings. It describes use of a survey to identify art achievement trends in relation to learners' social class, race, and gender, and select a sample for detailed exploration. These sections are followed by delineation of the sample of six classes selected for the multiple case study.

Chapter 4 discusses achievement in art in the context studied. It presents an audit trail of the process by means of which common sought-after criteria are established. Description of the exploration process is followed with a recount of some of the sought-after qualities, and how learners' recognition and realization of these features is measured in the research.

Chapter 5 details methods by means of which data on pedagogy were gathered and are coded in the thesis.

In Chapter 6 matrices are used to display analysis of learners' percentage grades and judgements in relation to their social class and pedagogy. School classes with different social class and achievement levels are juxtaposed in various ways to show pedagogic features associated with success for all learners, aspects linked to the success of learners in specific social positions, components linked to social class and not achievement, and features of secondary importance.

Chapter 7, the final chapter presents an overview of the thesis and discusses its limitations. It re-considers Bernstein's theories of pedagogy and knowledge in light of the research, and the usefulness of Wright's typology to define learners' social class. The chapter delineates pedagogy associated with recognition and realisation in art, and compares these pedagogic features with those linked to achievement in science.

The chapter concludes by suggesting some implications of the research for teacher training, art curricula, and state provision for art education.

1.5. Chapter summary

In this chapter I introduce my research. I explain that underlying the research is a desire for social justice, a desire to see quality art education available to all learners in South Africa. I name three points of origin for the study. The first is a body of literature pointing consistently to pedagogy linked to success in science for socially particular learners: I wanted to see if similar pedagogy was linked with success in art for socially differing learners. A second point of origin is South African education policy with its agenda to provide quality of learning opportunities for all citizens. Third, the study was inspired by the observation that pedagogy appears to shape achievement in art.

I go on to give a brief outline of my design and methodology, and to situate the study within the context of secondary school art education in South Africa. I end the chapter with a brief outline of each chapter in the thesis. In the following chapter I review literature within which the present study is located, and discuss theory underpinning the various aspects of the research.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAME

This chapter reviews literature within which the current research can be positioned, and outlines related theoretical frameworks forming its conceptual base. The main review and theoretical focus is of literature on learners' achievement patterns in relation to pedagogy and social context. Following this review in light of a necessity to theorize notions of both 'social class' and 'achievement in art', conceptual frameworks of these ideas are outlined.

The chapter commences by sketching dimensions of the debate around the relative importance of social context and pedagogy for learners' educational achievement. Second, it hones in on work focussing on contextual features associated with learner achievement, and third, on types of pedagogy linked to their success. Fourth, it outlines the theoretical framework used to conceptualise pedagogy and its relation to both individuals and structural elements. Fifth, it addresses criticisms of this theory. Sixth, it illustrates how the theory can be used to categorise pedagogy previously characterised differently in the literature. Seventh, it discusses the specific body of work from which the current study was developed, that investigating relations between contextual features, specific pedagogic features, and achievement in science. Eighth, presents the research question as developed from the literature. Finally, it lays out in the ninth and tenth sections, theoretical underpinnings of the concepts of 'social class' and 'race', and in the eleventh, 'achievement in art'.

2.1. On the relative importance of social context and pedagogy for educational achievement

Considerable research investigating factors associated with learner achievement has fed into debate on the relative significance of social contexts and pedagogy for educational success. On one hand, the importance of social context for learner achievement is generally acknowledged, as is apparent in Reynolds and Creemers' (1990: 1) assertion: "... few would argue that schools matter more than social circumstances in determining achievement ...". There is recognition on the other

hand, of the differential performance of socially similar schools: "... schools should not be judged according to raw scores ... but according to the value they add relative to their socio-economic circumstances ..." (Taylor et al 2003: 66). In the literature, research differs with respect to degree of focus on contextual or pedagogic features.

There is a body of work in which the emphasis is on the small degree to which school-related features, and relatively large weight of learners' social backgrounds account for variance in performance (see for example Coleman 1966; Jencks et al 1972; Mosteller and Moynihan 1972; Connell 1974; Marjoribanks 1979; Montmarquette and Mahseredjian 1989; Reynolds and Creemers 1990; Demack et al 2000). Differences between schools, facilities and curricula are found to account for only a fraction of difference in learner achievement, the latter being strongly related to, for instance, the socio-economic background of the students (Coleman 1966: 21-22; Mosteller and Moynihan 1972: 37-39); parental income and education levels (Connell 1974: 186) environmental and genetic factors (Jencks et al 1972: 253); family size, socio-psychological environment, social status, and learners' IQ (Marjoribanks 1979); parental income and education levels as well as learners' self-conception, age, and IQ (Montmarquette and Mahseredjian 1989); and learners' gender, ethnicity, and social class in increasing order of importance (see for example Demack et al 2000: 137-8).

The influence of home and family on school achievement is a topic less researched in South Africa than in fully industrialised countries (Jubber 1988: 287). Using a review of local literature on contextual factors associated with improved learning Taylor et al (2003) isolate features linked to performance. Drawing on various authors, they note the significance for learner achievement in South Africa, as internationally, of race, parents' education levels, family structure, and gender (Anderson et al 2001), parental income (Crouch and Mabogoane 2001; Van der Berg and Burger 2003), settlement type, and language (Simkins and Patterson 2002).

It is sometimes difficult to separate school and contextual effects (Demack et al 2000). It cannot be inferred that schools make no difference just because they receive children differing widely in their levels of educational achievement or improve the performance of different groups equally, and do not manage to close the gaps between groups. It could be said that school and home background together have a joint effect

on learners' achievement (Mosteller and Moynihan 1972: 21). It has been shown that school and contextual factors are intermingled (see for example Anyon 1981; Da Silva 1988; Gray and MacGregor 1991). It has been found for instance, that schools in "working-" and "lower middle class" areas tend to co-ordinate pedagogic activities more loosely and develop courses with lower levels of conceptual demand, than those in "upper middle class" neighbourhoods (Da Silva 1988). In a study documenting teaching in art classrooms in Canada, Gray and MacGregor (1991) found that teachers select curricula according to the types of learners they are teaching, and the social context of the school.

It has been noted that there is variety, at times to a great degree, in performance at socially similar schools (Reynolds and Creemers 1990:1; Demack et al 2000: 120; Teddlie and Reynolds 2000: 168; Taylor et al 2003: 57; Van der Berg and Burger 2003). While there is relative clarity around general characteristics of effective schools in particular social class bands (see Teddlie and Reynolds 2000: 168-9), there are few studies of factors which impact on learning in South Africa (Taylor et al 2003: 64).

Van der Berg and Burger (2003: 10) for instance, found that performance in South African schools is generally influenced by the "socio-economic background of pupils", "pupil-teacher ratio", "teacher quality" and "racial composition" of schools. However schools in one province, the Western Cape, outperform equivalent schools in other provinces. In these high-performing schools socio-economic status has less effect and the "quality of teachers" more effect than in other provinces (ibid. 12-13). When examining factors effecting performance in this group of schools, Van der Berg and Burger (ibid. 13-15) found that, apart from demographic features, teacher-qualifications are significant for mathematical performance, and teacher-age and pupil-teacher ratio but not teaching quality are important for general performance. Van der Berg and Burger (ibid.: 16) suggest that the low explanatory power of their model points to a role for omitted variables such as basic teaching resources and managerial efficiency.

Taylor et al (2003: 57-59) sketch a number of studies in which attempts are made to explain but fail to fully account for variation in performance between socially similar

schools in South Africa. Of the research sketched, Vinjevold and Crouch (2001) acknowledge that only 10% of variation is explained by selected school-level features, namely pupil-teacher ratios, teacher experience, teacher training, learning materials, and the frequency of assessment. In another study described by Taylor et al, Perry (2002) includes factors such as the condition of school buildings and presence of electricity and water, and found that these school-contextual features account for less than 1% of variation in performance. Also mentioned was an exploration in which school management factors and teaching practices are found to have no impact on learner performance (Khulisa 2001), although the researchers conducting this exploration note that their data are biased by the self-reporting of service providers and inexperience of fieldworkers (Taylor et al op.cit. p.58). Two other studies described by Taylor et al (op.cit. p.58-9), Kanjee et al (2001) and Simkins and Patterson (2002), point to the importance of language for performance.

The failure to fully account for variation in performance across socially similar schools in South Africa has been mirrored elsewhere in the world. In a large scale Canadian study into the relative importance of a range of personal, social class, school class and general school level features for learner performance (Montmarquette and Mahseredjian 1989), for example, the researchers found that although personal and social class items are key explanatory variables, two thirds of variation in students' achievement remains unexplained. Montmarquette and Mahseredjien (ibid.: 190) conclude that the unexplained variance is mainly associated with unobserved personal and socio-economic components, and that research into teacher characteristics, school organisation and management would be of limited help in establishing whether or not school variables explained school achievement.

Others (for instance Teddlie and Reynolds 2000: 239; Scheerens in Taylor et al 2003: 63) have found that the effects of educational processes on learner achievement are greater in developing than developed countries or, that family background effects on success are weaker in developing than developed countries. Coleman's (1966: 22) finding of the greater importance of teaching for minority than majority students parallels this finding.

I argue that there are few studies in the South African literature investigating links between school and demographic factors on one hand and learner performance on the other, that undertake detailed examination of the act of teaching and potential significance of aspects of the teaching-learning process[6]. In the current study, in light of the established importance of educational processes for success in the context of developing countries such as South Africa (Teddlie and Reynolds 2000: 239; Scheerens in Taylor et al 2003: 63), and given the lack of knowledge of aspects of the teaching-learning process linked to performance, I explore in detail, the act of teaching itself. The decision to examine pedagogy in detail was also based on personal reflection as a practising teacher myself over a number of years, that pedagogy appears to make a difference to learner achievement. I acknowledge the importance of demographic factors for learner performance by attempting to control for contextual features when examining the teaching-learning process, comparing aspects of the pedagogic process across socially similar schools. The following two sections position the present research in terms of its relation to specific contextual features, and categorisations of pedagogy.

2.2. Contextual factors and achievement

In the literature a varying range of contextual features is considered in relation to learner achievement. Context in its narrowest form is made up of one or more of the social class, ethnicity, or gender of learners (see for example Mosteller and Moynihan 1972; Connell 1974; Demack et al 2000; Van der Berg and Burger 2003). More broadly defined, contextual features include these as well as personal, family, and community characteristics. Examples of family factors include housing or settlement type and area (Douglas 1964; Taylor et al 2003); number of siblings and or family structure or environment (Marjoribanks 1979; Jubber 1988; Case and Deaton 1999; Anderson et al 2001; Taylor et al 2003); and being read to, extra reading, or parental

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[6] Two recent doctoral studies conducted at the same time as the current research investigate relations between social class, pedagogy, and learners' orientation to meaning (Hoadley 2005), and social class, classroom-level features and learning gain in mathematics (Reeves 2005) respectively. Hoadley (2005) makes detailed analyses of pedagogy and teachers' roles to show how and why the social class patterning in the specialization of student voice is reproduced at school. Reeves (2005), investigating pedagogy and opportunity-to-learn (OTL) factors in a large scale study, finds that specific pedagogic and OTL factors are associated with increased learning gain in mathematics and can be used to explain differential achievement between socially similar schools (schools in which learners are socio-economically disadvantaged).

expectations (Jubber 1988) or attitudes (Plowden 1967). Instances of personal characteristics include IQ (Marjoribanks 1979; Seekings 2001) or IQ, age and self-concept (Montmarquette and Mahseredjien 1989); and how often learners repeat school grades (Anderson et al 2001) or receive achievement stimulants (Teddlie and Reynolds 2000). Additional contextual features include language (Taylor et al 2003), school size and location (Teddlie and Reynolds 2000), poverty (Crouch and Mabogoane 2001), and type of school (Chall 2000;Teddlie and Reynolds 2000). There were two considerations in the choice of focal contextual features for the current research.

One important factor in the selection of contextual features for investigation is that economic circumstances, typically operationalised as poverty level (Crouch and Mabogoane 2001), parental education and/or occupation and household income (for example Coleman 1966; Connell 1974; Montmarquette and Mahseredjien 1989; Case and Deaton 1999; Anderson et al 2001), in the neo-Marxist manner as "social class" (Mosteller and Moynihan 1972; Demack et al 2000) or neo-Weberian form "economic –" or "socio-economic status" (Marjoribanks 1979; Jubber 1988; Teddlie and Reynolds 2000; Van der Berg and Burger 2003), emerge internationally and in South Africa, as the most significant learner background factor associated with achievement (see for example Mosteller and Moynihan 1972; Jubber 1988; Chevalier and Lanot 2000; Demack et al 2000; Teddlie and Reynolds 2000; Taylor et al 2003; Van der Berg and Burger 2003).

A second consideration in the choice of contextual features to be taken into account in the present study is the overlapping effect of social class and race (Demack et al 2000; Van der Berg and Burger 2003), necessitating inclusion of both features.

A further feature and one not taken into account is that of IQ. Debates around the importance of learners' genetic ability expressed as IQ were more prominent in the 1960's and 1970's than they are currently and with Halsey (1975), I adopt the position that the question of the relative significance of genes or environment for IQ is irresolvable. Further, there is a common association between IQ and social class (Marjoribanks 1979: 66; Jubber 1988: 289); both social status and IQ relate to learner achievement (Marjoribanks 1979: 66; Montmarquette and Mahseredjien 1989);

learners' IQ is related to their parents' education levels and occupations (Marjoribanks 1979: 66); and for given levels of social background and school, differences in IQ add very little to the prediction of another type of achievement namely, economic success (Bowles and Gintis 1973: 72).

In the current study, association between the social class, race and gender of learners and their achievement is explored. In the next section an attempt is made to sketch some dimensions of the literature on pedagogy and achievement in order to position the present research in relation to this research.

2.3. Pedagogy and achievement

There is a body of research which points to the significance of the pedagogic process for learner achievement in general (see for example, Bennett 1976; Da Silva 1988). There has been a paradigm shift in research into pedagogic practice, from one which focuses on teacher effectiveness, teaching styles, and learner's cognitive states, to one which stresses opportunities to learn, the quality of classroom tasks, and learning outcomes (Westerhof 1992; Davies 1995). Given the concern of the present research with power and control relations within and beyond classrooms, and the relation between these relations and learning outcomes for particular types of learners, the teacher is seen a key figure in the transmission-acquisition process. Literature on teaching style is accordingly examined.

'Teaching style' has been conceived in different ways. It refers for instance, to modes of teacher communication, and the influence of these on classroom practice (see for example Schwarz and Merten 1986, Hansen 1993). In other cases it is seen as the overall impression created by the habitual attributes or personal example of the teacher, which lend moral value to one or more aspects of the curriculum (for example, Carr 1986; Hansen 1993). In the majority of studies (see for example, Bennett 1976, Mosston 1972, Ramsay and Ransley 1986, Weinert et al 1990, Westerhof 1992) 'teaching style' revolves around 'methods of instruction', and alludes directly or indirectly, to the debate on the relative merits of 'traditional' versus 'progressive' teaching. The method-of-instruction studies have relevance for the current research.

It has been pointed out that subsequent ideal education types recall Dewey's (1900) "traditional" and "progressive" teaching (Chall 2000: 17-23). Chall points to Silberman's (1970) "formal-informal" distinction, where formal teaching stresses skills and has children sitting silently in desks following teacher-paced programmes, while informal classrooms are sound-filled workshop-like places in which children work at their own pace and teachers emphasise enjoyment of learning as well as acquisition of skills. Chall also notes Jackson's (1986) dichotomy in which "mimetic" teaching involves "adding on" to existing knowledge and skills, and "transformative" pedagogy "modifies" learners. Chall provides a third example with Stevenson and Stigler's (1992) "intellectualist" teaching for mastery of core academic subjects, and "anti-intellectualist" education where the focus is on meeting the needs of particular students.

"Progressive" teaching, also described as "student-centred", "open", "integrated", "individualised" and "indirect" (Chall 2000: 27), is generally associated with learning-by-discovery, making use of learners' curiosity, learner-centred teacher guidance, integration between different aspects of the curriculum, and learners' participation in classroom decision-making and direction of their own learning (see Bennett 1976: 3, 8). "Traditional", or "teacher and textbook-centred", "explicit", "classical" teaching (Chall 2000: 27) broadly involves strong teacher-direction, lecturing-style teacher talk, and the learning of facts as opposed to principles underlying discrete sections of information (Bennett 1976: 1).

'Traditional' or 'progressive' ways of teaching have been viewed in terms of their contribution towards learners' achievement in specific competences, or their facilitation of the learning of different kinds of knowledge (see Mosston 1972, Bennett 1976). Traditional pedagogy is associated with higher academic achievement than is progressive teaching, especially for children from low-income families (Chall 2000: 81-2, drawing on Gage 1978, and Stevens and Rosenshine 1981). Progressive education has been found to be superior to formal teaching, for affective variables, creativity and problem-solving (Chall 2000, drawing on Good and Brophy 1987, and Walberg 1990).

In other instances such as the large scale analysis of 800 studies into the effects of teaching on achievement (Walberg 1990), a mix of features is found to be associated with achievement. These features include "cues, engagement, corrective feedback ... reinforcement ... absence of irrelevant behaviour, bridging from previous knowledge and previous material ... frequent testing". Of significance for the current research is the support in the teaching style literature, for teaching comprising a mixture of components of 'traditional' and 'progressive' methods (see for instance, Bennett 1976, Ramsay and Ransley 1986, Weinert et al 1990, Westerhof 1992), and the acknowledgement that there is some overlap between the two ideal types of teaching (Chall 2000: 30) – a important question being the nature of the 'mix'.

The teaching style literature has two limitations for the present study however. First, the transmission/teaching process is divorced from contextual features such as the socio-economic status, race, and gender of learners. Implicit in this separation is the incorrect assumption that teaching style can affect all learners equally. Second, categorisation in teaching style studies is not at a level of generalisation sufficient to facilitate easy comparison of schemes. Brief outlines of two typologies illustrate the relatively low level of generalisation.

Bennett (1976) groups features of pedagogic practice to create a typology of twelve teaching styles. These typologies approximate a continuum from "informal", through several "mixed", to "formal" styles. Briefly, the informal style includes integration of subjects, learner choice of work and seating, no curbing of learner movement and talk, and intrinsic motivation (ibid.: 45). The "formal" style comprises whole class teaching and individual work, teacher control of learner talk and movement, and extrinsic motivation (ibid.: 47). "Mixed" styles feature combinations of the features of formal and informal styles.

Mosston (1972) in contrast, develops a theory in which teaching is seen as a series of decision-making chains. He places four distinct teaching styles on a continuum from "maximal" to "minimal" methods. At one end of the spectrum teachers make all decisions regarding teaching and at the other, learners make many of the decisions within broad teacher-set guidelines. Teaching methods are accordingly categorised as "command style", "task style", "reciprocal style", and "individual programmes" on

the basis location of decision-making. While Mosston's scheme functions at a higher level of generalisation than does Bennett's, it does not encompass all of Bennett's distinctions.

The current research is positioned within a tradition established by a relatively small and recent cluster of studies investigating relations between contextual features (social class, race and gender), pedagogy, and learner achievement. The conceptual underpinnings of these studies operate at a high level of theoretical generalisation, making possible comparison of pedagogy in different contexts as well as descriptions of teaching in the teaching style literature, in comparable terms. The cluster of studies is discussed after elaboration of the theoretical frameworks adopted in these as well as in the present study.

2.4. Bernstein's theory of pedagogy

In order to investigate relations between on one hand, macro-level features such as social class and race and on the other, micro-level achievements of individual learners in single classrooms, it is necessary to theorise the linking of the two spheres. Bernstein's (1971; 1975a; 1975b; 1981; 1995; 1996; 2000b) theory of pedagogy is useful for conceptualising such a link in that it has explanatory power with respect to transmission-acquisition processes as well as their contexts. It facilitates systematic exploration of relations within and between components of pedagogic practice, and links these relations to individual learners' achievements and social positions. It subsumes and can be used to clarify categorisations in the teaching style literature.

Bernstein's (1971; 1975a; 1975b; 1981; 1995; 1996; 2000b) theory utilises the concepts of pedagogic code, classification, and framing. Code is defined as a "regulative principle" which selects and integrates relevant meanings (orientation to meanings); realisation of meaning (textual productions); and evoking contexts (interactional practices) (Bernstein 1995: 12). The idea of "code" has been used to distinguish between orientation to meanings *and* realisation of meanings (ibid.). Code orientation can be restricted (such as when meanings are particularistic and context-dependent), or elaborated (when meanings are universalistic and context-independent) (Bernstein 1971: 14). Transfer of knowledge at secondary school level involves an

elaborated code, but this has different forms or modalities of realisation. The principles of codes are described in terms of "classification" and "framing": different classification and framing values constitute varying modalities of pedagogic code. Classification and framing values shape interactional practices and these practices give rise to differences in selection of relevant meanings, orientation to meanings, and textual productions (Bernstein 1995: 12).

Classification and framing refer to power and control relations respectively. These concepts are used together to create a model which can be applied to any pedagogic practice, at any level (for instance, from that of education system, to that of school, classroom, or family). Pedagogic code can be written as follows (ibid.):

$$\frac{O^{e/r}}{C+/-\ F+/-}$$

where $O^{e/r}$ = learners' elaborated or restricted orientation to language, and C+/- and F +/- = strong or weak classification or framing respectively.

The distinction between power and control relations is analytical, since these are empirically embedded. Power relations (classifications) create, legitimize, and reproduce boundaries, and operate between categories. Control (framing) socialises individuals into these relationships, and establishes legitimate forms of communication appropriate within the different categories.

Classification denotes the degree of specialisation of categories or separation between categories. When classification is "strong", categories will have clearly distinguishable identities and specialised rules of internal relations. When it is "weak", categories will be less easily distinguishable with less specialised internal relations. Particular strengths of classification require particular "recognition rules", by means of which individuals recognise the demands of particular contexts.

Framing constitutes forms of communication and control which legitimise relations within contexts. With 'strong' framing, the transmitter has explicit control. With "weak" framing, the acquirer has more apparent control. Bernstein (1975a: 5) notes

that in the case of the latter, the "hidden curriculum"' may increase the power of the teacher. Individuals need to possess "realisation rules" in order to realise texts (which could consist of forms of communication or anything that attracts evaluation) appropriate to specific contexts.

According to Bernstein (1996: 27 - 28), framing regulates both the "rules of the social order" (the hierarchical rules), and "the rules of the discursive order" (the discursive rules). The former refer to hierarchical relations in the pedagogic relationship, and include expectations about conduct, character, and manner. They are the rules of the "regulative discourse". The "discursive rules" refer to the selection, sequencing, pacing, and evaluation criteria of specialised knowledge. They constitute the rules of the "instructional discourse". The relationship between the instructional and regulative discourses is complex.

The instructional discourse is embedded in and dominated by, the regulative discourse (Bernstein 1996: 29) – a relationship written as follows:

$$\frac{ID}{RD}$$

The strengths of framing of the two discourses can vary independently of each other but since the instructional is dominated by the regulative, weak framing of the instructional will be accompanied by weak framing of the regulative (ibid.) Bernstein (ibid.) terms pedagogy with strong classification and framing values – a high degree of specialization and strong teacher control of instructional and regulative discourse – 'visible', and pedagogic practice with weak classification and framing or apparent learner control and implicit criteria, 'invisible'. Different modalities of pedagogic practice specialize learners' consciousness in different ways (Domingos 1987; Daniels 1988 and 1989).

Criticisms have been levelled at Bernstein's theory, two of which will be dealt with briefly.

2.5. Criticisms of Bernstein's theory

One of the criticisms of Bernstein's theory is that the concept of the elaborated code (system of context-independent meaning) is constituted as an absolute norm of linguistic practices, while the restricted code (system of context-dependent meaning) involves deprivation or inability to use an elaborated code. (Harker and May 1993: 175). Bernstein (1971: 135) posits that "... the normative systems associated with the middle class ... are likely to give rise to the modes of an elaborated code whilst those associated with some sections of the working class are likely to create individuals limited to a restricted code ...", and "... Children socialised within the middle class ... can be expected to possess both an elaborated and a restricted code, whilst children within some sections of the working class strata, particularly the lower working-class, can be expected to be *limited* to a restricted code ..." (ibid.: 136). These code orientations have indeed been shown to exist (Holland 1981). Bernstein (op. cit.) however acknowledges that the code-class correlations are crude and adds that it is possible to locate codes more precisely by considering "... the family role system, the mode of social control, and the resultant linguistic relations ..." which can be linked to the external social network of the family and includes occupational, trade union and religious institution roles (ibid.).

The verbal coding orientation of socially particular learners is not the focus of the present research, the chief emphasis of which is on learners' visual productions. With Bernstein (1995: 10) it is acknowledged that although the "ultimate display" at school is part of an elaborated code orientation, pedagogy can be regulated by restricted or elaborated codes, and the current study is based on the assumption that transmitters (teachers) can selectively realise elaborated and restricted codes. The current research investigates teacher elaboration of sought-after criteria and the association of degrees of this teacher elaboration with particular levels of learner performance.

A second criticism concerns the limitations of the concept of code for linking macro and micro levels of analysis (see Harker and May 1993). Harker and May (1993: 171) liken Bernstein's depth-surface distinction between generating structures (rules; codes) and practices, to structuralist analyses. They (ibid.: 177) assert that the concepts of rules and code are inflexible and deterministic (in that rules are seen to

determine practices), and that Bernstein fails to incorporate a meaningful conception of agency.

Bernstein (1995: 12) explains that codes are regulative principles which select and integrate relevant meanings (orientation to meanings), realisation of meanings (textual productions), and contexts (interactional practices). Different codes (described in terms of classification and framing values) are associated with different interactional practices which shape orientation to meaning and the production of texts. Rules refer to the set of controls (of selection, sequencing, pacing, evaluation) which shape pedagogic practice (ibid.: 4 and 11). In the current study it is assumed that transmitters can vary the classification and framing values of aspects of their pedagogic practice: a curriculum framed in restricted terms can be pedagogised using elaborated codes, for example. The role of the agent is seen to lie in manipulation of the rules which operate in the construction of code modalities. With Shilling (1992), Bernstein's concepts of code, classification and framing are seen to facilitate post-structural analysis of social production and reproduction.

2.6. Application of Bernstein's theory to the teaching style literature

Categories devised in studies on teaching style can be described in terms of Bernstein's (1981; 1996; 2000b) concepts of classification and framing. For example with Mosston's (1972) "command style" where the teacher makes all the decisions and lectures to convey information, there is strong framing of selection, sequencing, and pacing in the instructional discourse, and strong framing of the regulative discourse. In Bennett's (1976) "mixed" style where the teaching of subjects is integrated, there is weak classification of school subject discourses; weak classification of learner-learner spaces; weak framing of learner-learner relations (learners work in groups of their choice); and weak framing of hierarchical rules (low teacher control of learner talk). With Schwartz and Merten's (1986) "impersonal style" where the teacher takes no cognizance of the differing behaviour of individuals and treats all learners in the same way, there is strong framing of the regulative discourse in general. In their "personal" style where the teacher allows learners to approach her in ways with which they feel comfortable, there is weak framing of teacher - learner spaces and of regulative discourse. Da Silva's (1988) private school

emphasises problem-solving (weak micro-level framing of selection in the instructional discourse) and co-operation amongst learners (weak classification of learners and weak framing of the regulative discourse). His working-class public school has learners doing solitary work from textbooks (strong classification of learners) and producing short factual responses to questions (strong micro-level framing of selection in the instructional discourse).

Bennett (1976) found a significant difference in achievement between learners experiencing an "informal" teaching style (one with generally weak classification and framing of components of pedagogy) and those exposed to "mixed" styles (where the practices of individual teachers showed varying classification and framing values); and also between those having "mixed" and "formal" styles (the latter comprising relatively strong classification and framing values). Learners in "mixed" classes showed the greatest overall gain. There is support for Bennett's (1976) findings in the literature.

Ramsay and Ransley (1986) distinguishing between "open", "neutral" and "closed" teaching styles for example, found that learners had better reading comprehension when taught in a "traditional" manner, and better word-knowledge when taught in a "neutral" way. These terms parallel Bennett's "formal" and "mixed" styles respectively. Westerhof's (1992) distinction between "direct" and "indirect" instruction, with the former including "teacher-directed classrooms" (ibid.: 205) and students' being "actively involved in the subject matter" (ibid.: 206) echoes Bennett's "mixed-informal" description. Westerhof found that learning gain in mathematics was associated with "direct" ("mixed") instruction. Bednar and Heisler's (1987) finding that instructional effectiveness included focusing on the clarity of the "message" with a "relaxed communication style", is also consistent with some of Bennett's "mixed" styles.

The significance of "mixed" or "hybrid" teaching styles begs investigation into the nature of the hybridity, or exploration of which features should be strongly or weakly controlled. Bernstein's concepts of classification and framing make possible relatively precise and readily comparable descriptions of "mixed" as well as formal and informal pedagogy. The concepts have been thus used in a small cluster of studies

conducted chiefly in Portugal, and also in South Africa, the United States and the United Kingdom, in which relations between pedagogy and learners' social class and achievement in science are investigated. This research is detailed in the following section.

2.7. Social class, pedagogy, and achievement in science: relations

There are several studies using Bernstein's (1971; 1975a; 1975b; 1981; 1996; 2000b) concepts of classification and framing to describe pedagogy at the level of the school (see for example Daniels 1988; 1989; 1995; Sadovnik and Semel 2000), and the relation between pedagogy, social context, and learners' orientation to meaning (see Daniels 1989; Hoadley 2005), learners' recognition/realisation of specific (school-subject-related) competences (see Daniels 1995), or realisations (outcomes) (Sadovnik and Semel 2000). Most relevant for the current research however is the cluster of Portuguese studies which consider learners' complex cognitive competences in science in relation to their socio-economic status, race, and gender, and pedagogy at the level of individual classrooms (see for example Domingos 1987; Morais et al 1992 and 1995; Morais and Camara 1997; Morais and Neves 1997; Morais and Rocha 1997; Morais 1998).

In these studies classification and framing values are assigned to a comprehensive range of components of pedagogic practice. I refer to these components – any distinct and measurable aspect of the pedagogic process – as pedagogic features. In earlier studies (such as Morais et al 1992) three distinct pedagogic practices (P1, P2 and P3) are devised and taught to practicing teachers; the resulting pedagogy was observed and monitored, and learners' associated recognition (ability to select correct answers) and realisation (ability to produce correct scientific texts) for specific cognitive competences in science, analysed – learners having been selected on the basis of their social class, race and gender. In later studies (see Morais et al 1995), two of the original (most successful) pedagogic practices are modified to two slightly different practices, P4 and P5, and socially-specific learners' recognition and realisation again analysed. Results of these studies make possible the description of a configuration of pedagogic features enabling high levels of mastery of specific scientific competences by learners in general, and socially disadvantaged learners in particular. Bernstein's

(1971; 1975a; 1975b; 1981; 1996; 2000b) concepts of classification and framing are used to make direct links between on one hand, the structural elements in specific macro-social groups, pedagogic features, and individual learners' recognitions and realisations, and on the other, control relations manifest in pedagogy administered to different groups and the resulting individual competences within those groups. Characterisation of pedagogy in these studies is described briefly.

In pedagogic practices P1, P2, and P3 (Morais et al 1992), classification and framing values are clearly defined for "discourses", "agents" and "spaces" in both the instructional and regulative contexts in secondary school science classrooms. Classification and framing values are weak for pedagogic practice P1 and strong for practice P3, with those of P2 roughly between them.

Briefly, "classification of discourses" refers to the boundaries between academic and non-academic knowledge; that of "agents" to teacher-learner and learner-learner relations; and that of "spaces", to the degree of integration between school and academic or other local institutions, the classroom and the rest of the school, and teacher-learner, and learner-learner spaces in the classroom (see for instance Morais et al 1995: 4). Framing refers to control of instructional selection, sequencing, pacing and evaluation criteria, and control of regulative discourse.

Morais et al (1992) found that pedagogic practice P3 is associated with greater possession of recognition and realisation rules for complex cognitive competences such as problem-solving or the application of knowledge in new situations, by learners from higher social classes. Practice P2 is linked with success for learners with the "least favourable" backgrounds. Crucial factors for the latter appear to be the strong framing of evaluation criteria and weak framing of social relations. These findings echo those found less explicitly in "teaching style" studies (see for example, Bennett 1976, Carr 1986, Westerhof 1992). The findings are also supported by a number of studies focusing on either instructional or regulative discourses in science classrooms, which build on the findings of Morais et al (1992) (see Neves and Morais 1992, Morais and Antunes 1994, Morais and Miranda 1996, Morais and Camara 1997, and Morais and Rocha 1997, for example).

Based on the results of studies involving practices P1, P2, and P3, Morais et al (1995) developed an additional two pedagogic practices, P4 and P5. These are made up of the most successful elements from practices P1, P2, and P3. Briefly, pedagogic practice P4 consists of strong framing of evaluation criteria and macro-level selection and sequencing of knowledge, weak micro-level framing of selection and sequencing of knowledge, weak framing of pacing, and weak micro-level classification of academic/ non-academic discourses in the instructional context. In the regulative context, P4 has weak framing of hierarchical rules and weak classification of teacher-learner and learner-learner spaces. Pedagogic practice P5 differs from P4 only in that pacing in the instructional context is strongly framed, and teacher-learner spaces in the regulative context are strongly classified.

One teacher implemented both practices P4 and P5, each in separate primary school science classrooms for two years. The classes were organised so that both were made up of learners with a similar range of socio-economic status levels. The teacher was provided with a list of indicators to enable her to adhere to practices P4 and P5 respectively, and her teaching was monitored by researchers. Learners' achievement of simple and complex cognitive and socio-affective competences was measured.

After two years learners showed positive evolution of simple cognitive competences, and simple and complex socio-affective competences, with both pedagogic practices P4 and P5. The highest mean achievement in simple and complex cognitive competences was obtained by learners exposed to pedagogic practice P4 (ibid.: 25). There were some instances of higher achievement in the class which had had pedagogic practice P5, for example, by learners from lower social class backgrounds in cognitive competences, learners from higher social class backgrounds in socio-affective competences, and black working class learners in simple cognitive and socio-affective competences (ibid.: 29-30). The conclusion of this study is that pedagogic practice P4 generally increases achievement in cognitive and socio-affective competences, in socially heterogenous classrooms. It facilitates the access of socially disadvantaged learners to the elaborated code, and makes possible the clear explication of evaluation criteria (ibid.: 30-31). These conclusions are supported by Morais and Rocha's (1997) study.

The above studies point consistently to the components of pedagogic practice associated with high levels of achievement in cognitive and socio-affective competences by differing social groups. However, when dealing with classification and framing at classroom level, they consider instructional and regulative discourses in *science* lessons only (see Morais 1998). Further, only one study detailing *how* classification and framing values have been or could be weakened or strengthened, has been located (see Morais and Miranda 1996). This study is described briefly.

Noting the importance of the strong framing of evaluation criteria in the above research, Morais and Miranda (1996) investigate one way in which teachers explicate criteria, namely, through marking procedures. They consider the relation between learners' achievement in complex cognitive competences in fifth-year science classes and the extent to which they possess recognition and realisation rules for assessment; learners' social class backgrounds; the level of conceptual demand set by the teacher; the degree of explication of criteria by the teacher; and the social context of the school.

Morais and Miranda (1996) found that achievement by working-class learners increases when marking is explicated through strong framing of the instructional discourse and weak framing of the regulative discourse. The following list of teachers' marking procedures shows how the framing strength of instructional discourse increases from very weak, to very strong: "... the teacher may not make any notation ..."; "... he or she [the teacher] may simply write 'inc' [incorrect] ..."; "... [the teacher] may give an indication of the scientific contents ... which [sic] are missing ...", and "... he or she [the teacher] may write in the text which [sic] is missing ... to make it correct ..." (ibid.: 604). According to Morais and Miranda (ibid.), when the framing of the instructional discourse is increased, framing of the regulative discourse appears to decrease. Examples of regulative comments decreasing in strength: "... if you had paid attention in class your answer would have been right ..."; "... I can see you have studied ...", and "good".

A need for further study of relations between pedagogy and learners' achievement and their social positions, has been expressed (Morais et al 1995, Morais 1998). According to Morais (1998), research needs to be extended to other geographical

areas and school subjects, and to utilise methodologies other than those used above. The importance of foregrounding classroom observation in research has been noted (see for example Ramsay and Ransley 1986). Morais et al (1995) note the need for studies focusing on complex cognitive competences; thorough investigation of the variable of 'race' in students' achievement patterns; and utilisation of Bernstein's model to increase the precision of indicators for all the components of pedagogy to facilitate their use in teaching practice. The present research intends to address these points.

2.8. The current study

The present study is based on several assumptions, three of which are worth mentioning here. The first assumption is the all-pervasive link between contextual factors such as social class, and learners' achievement at school. The second is the importance of pedagogy for learners' success, especially socially disadvantaged learners. The third is that teachers, with appropriate training and knowledge, can selectively vary components of their pedagogic practice at will and in response to contextual characteristics.

The current research hopes to expand on the findings of studies led by Morais, a tradition of research furthering the ends of social justice by taking into account pedagogy as well as learners' social contexts when considering learners' performance, and investigating pedagogy linked to high levels of achievement not only for all learners, but for socially disadvantaged learners in particular.

The present study aims to ascertain whether or not classification and framing of components of pedagogic practice associated with achievement in science in Portuguese schools, are similarly related to achievement in art in South African schools. It intends to explore in detail, how classification and framing of different components of pedagogic practice can be strengthened or weakened, for teacher-training purposes. Involving as it does a knowledge type different in form to that in the Morais studies (art as opposed to science), the study by necessity uses different methodologies to those utilised in the Portuguese research: it is more exploratory and qualitative than the former research. Instead of pre-designing and implementing

pedagogic practices, existing pedagogies associated with varying degrees of learner success were observed and are recorded in detail.

After Morais et al (1995), it is expected that pedagogic practice with an instructional discourse characterised by strong framing of evaluation criteria (where criteria are explicated through dialogue with learners); strong macro-level and weak micro-level framing of selection, sequencing and pacing (of principles and processes); and weak micro-level classification of academic/non-academic discourses (where there is opportunity for introduction of everyday knowledge), will be associated with the highest mean achievement in art-based cognitive competences in socially heterogenous classrooms. This practice would include weak framing of hierarchical rules (symmetrical authority relations) and weak classification of teacher-learner and learner-learner spaces (allowing free movement between the teacher and learners, and amongst learners themselves). The research question is:

> What, if any, are the specific pedagogic features associated with achievement in matric[7] art by learners in general, and socially disadvantaged learners in particular?

Addressing this question necessitated several investigations. First, it was necessary to establish the existence or otherwise, of achievement patterns in art. Patterns are sought in relation to learners' social class, race, and gender (see Chapter 3). Second, what constituted achievement in art required definition (see Chapter 4). Third, in order to capture the content and processes of transmission and acquisition in art classrooms, it was necessary to record and analyse naturalistically observed pedagogy rather than relying on characterisations of teaching in science classrooms or based solely on theory (see Chapter 5). Conceptualisations of 'social class', 'race' and 'achievement in art' are theorised as described in the following sections.

2.9. 'Social class': theoretical underpinnings

Art is a subject requiring creative input from individual learners. Observation quickly reveals that some learners are more easily able to provide this input than others: some

[7] Matric art constitutes art produced for exhibitions learners are required to display for their final art gradings at the end of the twelfth 'matriculation' year of secondary school.

appear to bring 'relevant' resources to the classroom while others struggle to do so. On what basis are these learners unequal? There is the issue of talent or giftedness, although it has been posited that high levels of skill are associated with hard work (Clark and Zimmerman 1994: 276). There are on the other hand the ideas of unequally-distributed cultural or educational capital (Bourdieu 1984), and differing dispositions of 'working class' and 'middle class' children (Bernstein 1971, 1975a, 1996), both of which are discussed below. In order to conceptualise 'class' the following were consulted: documents showing the grading of occupations by South African Central Statistical Services (CSS 1998); educational research with a focus on achievement in relation to social class, and theories of 'social class' and 'social stratification'.

The principles upon which South African (CSS) occupational categories are based are not explicit. They constitute mixtures of levels of authority, education and skill levels, type of education (academic or technical), type of work (manual or non-manual), autonomy, and skill levels. Their intellectual origins appear to be empirical rather than theoretical.

Recent research into learner performance in relation to social class is frequently conceptualised using Bernstein's (1971; 1975a; 1975b; 1981; 1996; 2000b) sociological theories of pedagogy. Apart from brief descriptions of "middle-" and "working class" families (Bernstein 1971:25), and a comparison of "old" and "new" middle class fractions (Bernstein 1975a: 120), Bernstein provides only general references to "class". A body of work conceptualised in terms of Bernstein's theoretical framework (including Morais et al 1995, Morais and Miranda 1996, Morais and Camara 1997, Morais 1998, Neves and Morais 1992, and Rocha and Morais 1997) makes use of a collapsed version of the scale of social class described in Domingos (1987).

In the latter an analytic or theoretical explanatory conception of social class is replaced with a "nominal" or descriptive concept, according to which social groups are distinguished "... on the basis of occupation or education or both ..." (ibid.: 93). The education scale, based on number of years and type of education (technical or academic), can be used on its own or in conjunction with the occupational scale.

Domingos' construction of an occupational scale around the needs of particular research is in line with common practice. She replaces the analytic concept with its attendant difficulties regarding the empirical specification of class boundaries, with an occupational scale that is believed to present "occupational functions associated with differential patterns of pupil achievement" (ibid.: 94). Here criteria used in the construction of the scale are the "socio-economic condition of the parents" and "independence". Other implicit criteria such as the degree and type of skill (manual or non-manual) required in an occupation, and relation to authority, are also present – all of these factors together making up the occupational categories.

Domingos' *gradational* scales with their focus on the advantages of knowledge and skills follow a neo-Weberian logic. They are useful for describing patterns in achievement. They do not however, make explicit the dimensions of inequality in a systematic way. The current study aims to utilise a *relational* definition of class, where different social groups are seen in relation to each other and to different dimensions of inequality. This approach has potential explanatory power with respect to inequality: it provides theory to characterise the specific advantages that some learners may have.

I share with Edgell (1994: 45) the view that class schemes need to reflect both the "shared values" implicit in neo-Weberian occupational schemes, and explicit "conflicting values" of neo-Marxist class schemes. There is also "emerging consensus" between the two approaches (see for example Edgell 1994:36). This concurrence can be seen in leading neo-Marxist Wright's (1997) refinement of an earlier class typology (1979, 1987, 1989) by adding a "skills" dimension and gradational features to a previously simpler relational model. It can also be seen in prominent neo-Weberian Goldthorpe's positioning (in Goldthorpe and Hope 1972, Erikson and Goldthorpe 1993) of social strata or gradations *within* a relational 'class structure' rather than ranking a social hierarchy according to features such as prestige, status, and economic resources.

Because of the theoretical complexity of the concept of class boundaries, this study as did Domingos' (1987) research, does not discuss different models of social class.

Wright's (1997) typology of "locations within class relations" has been selected for two reasons. First, it provides a refined theoretical framework for class analysis, taking separate account of ownership as well as skill and authority levels. Because it structures these features in a systematic way, it is possible to examine other factors such as learners' achievement, in relation to the different dimensions of social class (ownership, skill and authority levels), separately. It thus has potential to make articulation of the basis of inequality between groups of learners clear. Second, it illuminates the empirical, taking into account what Wright (ibid.: 25) has termed "the problem of exploitation", streamlining relations between specific observed features.

2.9.1. Wright's typology

Wright's (1997: 19 - 23) typology of "locations within class relations" broadens the traditional Marxist capitalist-worker division of social classes by adding sub-categories to each of the classes. These sub-categories become "locations" within the traditional "class relations" (see Table 1).

Wright identifies three categories of capitalists (employers) according to numbers employed. "Petty bourgeois" individuals are those who work alone for themselves or with one other. "Small employers" employ between ten and twenty individuals; "large employers" twenty or more.

The class of workers (employees) is sub-divided according to first, position in relation to authority in the production process and second, possession of skills and expertise. Wright identifies three authority levels (ibid.: 20-22). At the highest level are "managers and supervisors" or those with "capitalist class powers" in that they dominate production and have high earnings or "privileged appropriation relations". At an intermediate level are supervisory positions closer to workers, and at the lowest level, workers. Wright links positions in the authority hierarchy with associated interests, "capitalist-", or "worker-inclined".

Wright (ibid.: 22-23) also includes three levels of "skill and expertise", the highest for specialised "experts"', and intermediate and lower levels for "skilled" and "unskilled" workers respectively. For Wright, the possession of skills/expertise, being only indirectly associated with exploitation, is less important than authority in determining

class location. He includes it on the basis that those with skills/expertise/knowledge have power to appropriate surplus by virtue of their strategic location in the production process, afforded by their control of a scarce form of labour power.

Some adaptations have been made to Wright's typology in the present research. First, numbers of people employed by employers have been changed, because of the cheapness and low skill levels of labour in South Africa. The maximums of one and ten employees in Wright's "petty bourgeois" and "small employees" categories are replaced here with two and twenty, respectively. A building contractor with one or two skilled workers and ten to fifteen unskilled labourers for instance, would be classified as a 'small employer'.

Second, four skill levels were conceived and instead of Wright's "expert", "skilled" and "unskilled" designations, the skill-categories of 'expert', 'skilled' and 'semi-skilled' are used. It was thought important to distinguish between 'skilled' and 'semi-skilled' in the current study since "skilled" appears to span a range of levels and most individuals in the sample fall into this category, and there are insufficient numbers of "non-skilled" parents. Reasons for the latter are historical: under 'apartheid', South Africa's policy for the separate development of different racial groups, curricula at schools attended by children classified as "black" did not offer fine art. Fine art was found in most schools for children designated "white" and a few for those categorised as "coloured". With the advent of democracy in 1994, schools began to become racially integrated but fine art was still mainly offered at 'ex-white' schools. Schools in the study are 'ex-white' schools, racially integrated to different degrees, but with very few really poor 'black' learners.

The third change to Wright's typology is the addition of numbers to 'cells', to make differentiation between categories easier. This numbering does not imply ranking of categories in any way.

Table 1: Wright's elaborated class typology, adapted

RELATION TO MEANS OF PRODUCTION

	OWNER	EMPLOYEES			
		EXPERT (professional occupations)	SKILLED (technical and craft occupations)	SEMI-SKILLED (all other occupations)	
	12 Capitalists (more than 20 employees)	9 expert managers	6 skilled managers	3 semi-skilled Managers	MANAGERS
Number of employees	11 Small employers (3 – 20 employees)	8 expert supervisors	5 skilled supervisors	2 semi-skilled supervisors	SUPERVISORS
	10 petty-bourgeois (0 – 2 employees)	7 expert workers	4 skilled workers	1 semi-skilled workers	WORKERS

RELATION TO AUTHORITY

RELATION TO SCARCE SKILLS

Legend
1,2,3,4,5,6,7,8,9,10,11,12 = numbers added to cells for easy reference (numbers are not hierarchical)

2.9.2. Limitations of Wright's typology

Although Wright's (1997) model is useful for categorising dimensions of inequality, one of its limitations for the present study is that it defines class solely in relation to *economically* relevant capital. Art education falls into the field of culture, a field which has been shown to operate along "rules" of its own, different, but not independent of, the "economic field" (see Bourdieu 1984 and 1996). The importance of one aspect of class, namely, parental education levels, for learners' achievement in art was anticipated, and Wright's "skills" dimension thought potentially too crude to reveal patterns in learners' grades. Bourdieu's notion of different types of capital (see

Bourdieu 1984 and 1996, and Bourdieu and Wacquant 1992) was thus used in an attempt to refine Wright's skills dimension.

With Bourdieu, it is held that capital can only be defined within the theoretical systems it constitutes: its possession "... commands access to the specific profits that are at stake in the field ..." (Bourdieu and Wacquant 1992: 96). Of interest for the current study is the particular capital brought by learners to the art classroom. Bourdieu (1984; 1996) writes of "cultural capital" and "educational capital".

Cultural capital refers to that inherited or transmitted by the family (Bourdieu 1984: 70-2). It constitutes "good breeding" and enables individuals to start acquiring "legitimate culture" without wasting effort on "... deculturation ... to undo the effects of inappropriate learning ...". It is associated with, amongst other things, appreciation for certain forms of art.

Educational capital, on the other hand, includes educational qualifications together with "guaranteed cultural capital" (ibid.: 80), the latter being those aspects of inherited capital sanctioned by the education system.

It is expected that learners possessing cultural or parental educational capital will be at an advantage in the art classroom. This idea is supported by Bourdieu's (1984: 260-7) study of the distribution of knowledge of, and preferences in, art and music. In this research, preferences for certain forms of art such as "abstract painting" are positioned amongst those with educational capital; social groups in the habit of visiting "modern art museums" had cultural and educational capital. A group which expresses views such as "paintings are nice but difficult; I don't know enough to talk about them" has very little educational and cultural capital.

In order to incorporate differences in parents' educational backgrounds in analyses of art achievement trends in the current research, a fine grading of types and levels of qualification (see Table 2) is superimposed on Wright's typology. Educational sub-categories are ranked according to the degree of their expected influence on learners' art grades. The fine grading is kept in mind when categorising parents' occupations according to the typology, rather than being allowed to generate a multiplicity of

unwieldy new cells. Education levels of 'some of secondary school' or lower are classified as 'semi-skilled'. Possession of 'some of secondary school and vocational training'; 'all of secondary school' and 'all of secondary school plus vocational training other than university degrees' are categorised as 'skilled'. 'Experts' comprise those with university degrees. In this scheme a pastor and head of church with a Masters' degree is placed in Category 8, while his counterpart with 'some of high school' is positioned in Category 5. Data on parents' education types and levels is retained to facilitate separate analyses of learners' achievement in relation to these features only.

Table 2: Levels and types of parental education

A. No education
B. Some/all of primary school; some/all of primary plus vocational training
C. Some of secondary school
D. Some of secondary school plus vocational training
E. All of secondary school
F. All of secondary school plus technical/vocational training other than university degrees or tertiary level art diplomas
G. All of secondary school plus one or more university degrees (excluding art degrees)
H. All of secondary school plus one or more art degrees/tertiary level art diplomas

2.10. 'Race': theoretical approach

The dominant view of race in current literature is that it is a social construct (see for example Hannaford 1996; Banton 1998). Hannaford (1996) shows for instance, how in the ancient world divisions between people were based on notions of "family, tribe, and clan", and how from the seventeenth century onwards the writings of various scientists, historians, philologists, and anthropologists reconstruct the natural histories of types of peoples, giving rise to "... an autonomous idea of race ...". Banton (1998) discusses different constructions of "race" including race as "customary designation" such as the labelling of individuals as "white", "negro" or "Indian" in nineteenth-century United States; the use in sixteenth and seventeenth century literature of "race as lineage" where differences are traced back to separate origins; "race as type" in nineteenth-century science where "biological type" is a level of classification based on physical appearance and refers in different instances to variety, race, family, genus, species, and other classificatory categories; Darwin's idea of "race as subspecies" where continuity of human characteristics is based on genetic inheritance and diversification on environmental circumstances; and race as "social status" or "social

class" where race and social positions are inter-twined. Clearly, as Banton (ibid.: 198) maintains, distinctions on the basis of race serve the purposes of securing or exclusion from civil and other rights for different social groups respectively.

The ideas of 'race' and 'ethnicity' are frequently used together. Few sustain a dualistic conception of these concepts, in which ethnic distinctions are constructed on the basis of cultural practices and racial categorisations on the evidence of "natural" or physical phenomena (Sollors 1996; Banton 1998; Gunaratnam 2003). The complex inter-relation between the two is frequently acknowledged: Gunaratnam (2003: 5) for instance, drawing on Hall (2000), refers to racism's "two registers". Differences between race and ethnicity have been described in terms of degree rather than kind (Sollors 1996: xxx). It has been pointed out that ethnic groups are sufficiently broad to include several racial groups (Sollors 1996: xxx, drawing on Gordon 1988), and that racial groups may be ethnically differentiated (Sollors 1996: xxxi).

In the current research I utilise 'race' as a term in common use in South Africa. It constitutes a social construct based on a culturally perceived mix of physical and cultural features. Presuming a degree of common understanding of racial categories constructed in apartheid (racially segregated) South Africa, I asked teachers in the study to estimate how they thought learners would have been classified prior to the onset of democratic government. When asking teachers to categorise learners I suggested that they use the four categories frequently used in research namely "black", "white", "coloured" and "Indian" (see Anderson, Case and Lam 2001: 39), and a fifth racial group mentioned by some teachers, that of "Asian".

2.11. 'Achievement in art': theoretical antecedents

In order to conceive of 'achievement in art' it is necessary to refer to an understanding of exactly *what* it is that is being achieved. Defining what is being achieved is no easy task. Bernstein's (1996; 1999; 2000b) theory of knowledge structures is used to explain reasons for this difficulty, part of which involves the assertion of different views from within the field of art. Discussion of Bernstein's theory and different views in the field, as well as conceptions of achievement explored in the present study follow.

2.11.1. Bernstein's theory of knowledge structures

Durkheim's distinction between on one hand "sacred", non-empirical, conceptually ordered or "idealized"[8] knowledge, and on the other "'profane" or sensual, common-sense systems of meaning deriving from bodily contact with the world – as sketched by Muller (2000: 77-82) – is useful for distinguishing commonsense and esoteric discourse. Neo-Durkheimian Basil Bernstein characterizes different forms of epistemological practice within the realms of the sacred and the profane (ibid.).

Bernstein (1996: 170) writes of two types of discourse, both of which are arbitrary and optimized in particular social relations. The first of these (ibid.: 171-2), "horizontal discourse", is local, context-dependent, tacit, and contradictory across contexts but not within contexts, and is not of concern here. The second, "vertical discourse" (ibid.: 171-9), which consists of coherent, explicit, systematically-principled, hierarchically-organised, specialised languages or modes of interrogation with specialised criteria for the production of texts, is useful for positioning the secondary school subject art as a form of knowledge.

According to Bernstein (1996: 173), vertical discourse can have "hierarchical" or "horizontal" knowledge structures. Hierarchical knowledge structures are regulated by an "integrated code" in which knowledge is integrated into increasingly abstract or general propositions, as exemplified by the discipline of physics (Bernstein 2000b: 161-5). In horizontal knowledge structures a "serial" or "collection" code operates in the production of knowledge, where non-translatable, non-comparable specialised languages are accumulated (Bernstein 1996: 173). Elfland's (2004b: 756) categorisation of domains mirrors Bernstein's knowledge-structure types: "well-structured" domains such as science "are organised around laws and generalisations that cover numerous cases", while in "ill-structured" domains such as the arts, "learners are forced to organise their understanding by assembling knowledge from individual cases".

[8] Durkheim's "idealization" means at least two things (Muller 2000: 78). It refers first to the cognitive or speculative activity in which objects and relations are manipulated in virtual space and second, projection towards "... that which is more desirable ..." (ibid.)

Bernstein (1996: 174; 2000b: 163-5) divides horizontal knowledge structures into those with "strong" and "weak" grammars. Horizontal knowledge structures with strong grammars are collection-code discourses with explicit formally articulated concepts, conceptual relations and procedures, such as economics and linguistics. Horizontal knowledge structures with weak grammars are less formally articulated with "implicit conceptual syntax" and weak power to generate descriptions. Knowledge structures with weak grammars are exemplified by sociology and cultural studies.

Transmission in horizontal knowledge structures with weak grammars can be explicit with respect to principles, procedures and texts to be acquired such as in the social sciences (Bernstein 1996: 175 and 2000b: 169), or tacit, where modelling precedes doing, such as in crafts (Bernstein 1996: 175 and 2000b: 169; Gamble 2001: 3).

Bernstein (2000b: 164-172) notes that while acquirers may not have difficulty recognising that they are "speaking" a hierarchically structured form of knowledge such as physics, the implicit conceptual syntax of more weakly structured knowledge forms such as cultural studies may render them anxious as to whether or not they are speaking these languages. "Knowing" in a horizontal knowledge form with weak grammar entails possession of a particular "gaze" or "perspective" with which acquirers recognise canonical names and associate these names with languages – "knowing" involves "managing" or being able to select appropriate canonical names and languages. The gaze or perspective becomes the principle of recontextualisation or mechanism by means of which acquirers create texts. Perspectives may be a function of power relations.

I argue that art is an example of a horizontal knowledge structure with weak grammar, and that this structuring is above the level of individual cases. Different art "languages" can be seen to constitute different styles, traditions or paradigms in art – examples of these languages being classicism, romanticism, realism, modernism, and post-modernism amongst others. Brief elaboration of this use of the term "language" follows.

I describe as classical, an approach in which importance is placed on principles such as form, balance, harmony, proportion and perspective – as exemplified in Greek art of the fifth century, High Renaissance paintings in the style recommended by Alberti (1425), eighteenth-century principles of form (see the work of David, Houdon, Ingres, and Canova for instance), and in drawing from life from the sixteenth century to the present day. I suggest that this classical mode is a "language" in Bernstein's sense, and distinct from a romantic mode – the two traditions having been set up in opposition to each other in the history of art texts (see for example Hartt 1977: 315; Arnason 1978: 14). A romantic approach as exemplified by Hellenistic sculpture, Mannerist and Baroque art, the works of Goya, Gericault, Delacroix, Blake, Turner, Friedrich, Corot, Millet, Daumier, other nineteenth-century Romantic painters, and expressionist art, privileges emotionalism over form, colour and texture above line, open over closed spatial organisation, and feeling above intellect (Hartt 1977: 315).

Another example of a Bernstein-type "language" in art is constituted by the modernist paradigm to which styles such as Fauvism, Expressionism, Abstract Expressionism, Bauhaus, Cubism, Futurism, and De Stijl are assigned. I describe this paradigm as a distinct "language" because although there is no single modern mode (Jencks 1989: 22), in this idiom value is consistently placed on abstraction; "truth to materials"; "logical consistency"; aesthetics; "the essence of each art language"; "purifying" the art language in use; and "perfection of the expressive medium" (Gombrich 1979: 124-5; Jencks 1989: 19-28, referring in part to Clement Greenberg's definition of Modernism). In this mode art-works are "self sufficient" or autonomous, and separable from their contexts (Marriner 1999: 56-7). I offer Post-modernism with its eclectic selection and synthesis of aspects of traditions, layering of texts on top of one another, and hybrid styles – as exemplified in Pop Art, Hyperrealism, Allegorical and Political Realism, New Image Painting, La Transavanguardia and Neo Expressionism amongst other styles (Jencks 1989: 7-9; 25) – as a contrasting "language". Creators working in the Post-modern paradigm retain "modernist sensibility" which together with eclecticism distinguishes their work from that of "revivalists", through its "... irony, parody, displacement, complexity, eclecticism, realism, or any number of contemporary tactics ..." (Jencks 1989: 14). Post-modern art-works have "double coding", "a strategy of communicating on various levels at once"; elements of distant and recent past styles, and popular and elitist signs are often used within the same

works (ibid.: 19). An implication of Post-modernism is that a work of art "... only comes into being in its relations ... those relations are not contingent but (logically) necessary to both its ontological status and its meaning ..." (Marriner 1999: 57): meaning is relational rather than inherent in the work.

I position the secondary school subject art *between* on one hand, horizontal knowledge structures with weak grammar and explicit transmission, and on the other, horizontal knowledge structures with weak grammar and tacit transmission since art is constituted through the visual *and* the verbal; it is taught through modelling *and* talking, both aspects of which can be seen in literature on art education.

The visual aspect of art is described as "non-verbal" and "irreducible" to verbal language (Atkinson 1999: 112), not codable in ways other than visual (Gombrich 1982: 143), and apprehended through an "aesthetic mode" (Eisner 1998) where visual metaphors are recognised through the act of "looking" (Elfland 2004a: 755). The metonymical or metaphorical character of descriptors of the visual illustrates their partial untranslatability into the verbal (Eisner 1998: 75; Stibbs 1998: 203). There is evidence that learners recognise visual qualities without necessarily being able to use the appropriate technical terms verbally (Bennett 1990: 152).

Art's verbal aspect is also attested to in the literature: it is described as "partly constituted" or "mediated" through verbal language (Atkinson 1999: 110); manifest as spoken or written criticism and theory. Roles assigned to the verbal aspect of art vary from that of developing thinking or emerging ideas to expressing thought (Bennett 1990: 150-1; Hughes 1999: 132) or locating artworks within visual traditions (Fuller 1986; Abbs 1992: 279; Hughes 1999: 132) or cognitive maps (Cunliffe 1992; 1999). The verbal in the form of theory can broaden critical activity (Brookes 1992: 156; Allison and Hausman 1998: 125; Stibbs 1998: 202; Wilde 1999: 49), and be harnessed for visual manipulation of "need and desire" within social groups (via the discipline of graphic design) or exposing "the manipulative devices" of "visual culture" (Wilde 1999: 50). The verbal in the form of theory renders art scholarly (Allison and Hausman 1998: 122; Wilde 1999: 49), bridging its material, manual craft practice and its ideational, conceptual, abstract basis – linking aspects noted in history

of art texts such as Macdonald (1970: 17) and Hartt (1977: 119) to have split in the Italian Renaissance with the elevation of painting to a liberal art.

In short, although visual art is by definition visual, verbal language contributes to the making, meaning, understanding, and contextualising of artworks. Meaning in visual imagery is changed by spoken or written texts associated with it (Berger 1972), and this applies to centuries-old works of art as well as those in the process of being created. Different conceptions of art are sketched below to locate the definition of 'achievement in art' in the present study.

2.11.2. Differing conceptions of art

The importance of context for artistic judgement is frequently attested to (see for example Tilghman 1984: 68). I conceive of assessment in secondary school art as nested in the field of art and influenced by issues in this field. I sketch relevant concerns and my own position below.

The paradigms of modernism and post-modernism inform current art-making. The question as to what constitutes 'art' or 'good art' is a modernist one, the post-modern equivalent being enquiry into the construction of meaning in relation to a given text. It has been pointed out that the question 'what is art?' (and therefore the question 'what is good art?') could not have been posed before the middle of the eighteenth century when painting, sculpture, music, poetry, dance and architecture were classified as "fine arts" (Tilghman 1984: 2; Staniszewski 1995: 39). Essentialist accounts of art focus on underlying principles. Collingwood (1963) for instance, separates "art" and "craft". Rosenberg (1967) while asserting that artworks can only be compared when they are alike with respect to style, medium and content, concludes with an index of quality in art. Wolfflin (1950) also emphasising the importance of comparing "type with type", is concerned with "universal forms of representation" and uses particular concepts to analyse artworks in general. From a post-modern point of view questions addressing definitions of art and quality in art are inadvisable since they give rise to essentialist answers (Atkinson 1999: 111): from a post-modern standpoint authoritative voices are refused (Goldstein 1996).

Post-modernism's legacy of the collapse of certainty regarding boundaries aesthetic, intellectual, pedagogic and otherwise is frequently argued (see for example MacDonald 1991; Tagg 1992: 59; Burton 2004: 554) or illustrated (see Millard's 2001 account of London's "tastemakers"). While boundaries such as those between art and design are still clear for some (see for example Wilde 1999: 50), others (for instance Macdonald 1970; MacDonald 1991: 167, 175-7; Tagg 1992: 59-60; Staniszewski 1995; Marriner 1999; Stankiewicz et al 2004: 34-48) note the inter-connectedness of fields such as art and social or economic contexts (into which design can be seen to fall), and "high" (fine) art and "popular" (folk) art.

Current history of art texts interrogate and contextualise cultural productions rather than treating them as homogenous or evolutionary (see for example Brookes 1992; Panofsky 1995; Staniszewski 1995; Goldstein 1996; Freeland 2001). Goldstein (1996) for example, discusses differing versions of history of art. In "But is it art?" Freeland (2001) analyses art as ritual; art as imitation; art as expression; art as communication; diverse cultural manifestations of art; relations between money, markets and museums; aesthetic versus contextual analysis of art; Dickie's (1974) institutional theory where art's status is conferred by persons established in the art-world; Danto's (1981) "artworld theory" where artworks are constituted through their interpretation; and other theories. In "Believing is seeing: creating the culture of art", Staniszewski (1995) positions concepts such as "fine art", "aesthetics", "the academy" and "originality", historically. Brookes (1992) elaborates four recurring art-world theories: "imitationalism", "emotionalism" (what I have termed 'romanticism'), "formalism" (what I have termed 'classicism') and "functionalism". The breadth of definitions of art has been noted (Freeland 201: 206-7), as has the fact that no single theory has been universally accepted (Tilghman 1984: 23).

There is on one hand an embrace of local context, eccentricity and an absence of guiding principles where "each artist is forced to invent a personal history of art" (Perl 2000: 121) and successful artworks have their own "internal logic" (ibid.: for example 49-59). There are on the other hand attempts to stem relativism: Gombrich's (1979) notions of "style" and "canons" being a case in point.

On one hand, the idea of 'style' can be used to reduce relativism. Gombrich (1979: 126), drawing on Van Gogh's reference to the "complicated calculus" of fitting colour and imagery into "complex configuration[s] of contrasts and consonances", points out that problem-solving in the course of creation of an artwork emerges in the context of art, learned from fellow artists and the history of art. Art although differing from science as a form of knowledge, is "cumulative": in making artistic judgments, artists have before them "countless experiments in creating orders of a similar kind and value" (ibid.: 129).

Artworks are customarily measured against performances of the same kind – assessment of art-works is carried out in relation to other art-works in the same style: different styles "have their own yardsticks of success" (Gombrich 1979: 154) and style "determines the level of our expectations and our response to deviations from the norm. Without this framework of convention we cannot really assess the significant surprise" (ibid.: 160).

That the concept of style is insufficient to quell charges of relativism attests to the weak structuring of art as a form of knowledge. Descriptions by three distinguished art historians, of Streeter's painting of the Sheldonian Theatre ceiling, while showing that the writers have an ideal image of Baroque ceiling painting against which they judge Streeter's image, are contradictory (Gombrich 1979: 147-8). One historian notes that "... the composition has unity and the figures are firmly drawn ... foreshortening competent enough ..."; another denies that there is "real ability to convey unified movement" and finds some of the foreshortenings "largely misunderstood" (ibid.). While the contradictions can be explained with recourse to the idea of stylistic complexity – what may seem like personal bias is the emphasis placed by different judges on different stylistic points (ibid.: 152) – a further concept is needed if structuring of the field is to be described. Gombrich's (ibid.: 154-6) metaphor of "the Olympus of art" with "room for all grades of divinities" is useful here.

Artists or artworks atop this "Mount Olympus" constitute the "canon" or the "peaks" by means of which the field is structured (Gombrich 1979: 154-6). These peaks offer "points of reference" for sought-after qualities without which direction is lost (ibid.).

Qualities for which great artists gain status are not susceptible to quantification (Gombrich 1979: 153): mastery is multidimensional and inventive, finding solutions to artistic problems in unexpected ways. I posit, with Gombrich (ibid.: 163) that had Streeter's ceiling caused "raptures", it would have been added to the canon. The importance of the canon lies in its position in a field or as Gombrich (1979: 164) puts it:

> "... Maybe the canon of beauty spots lets us down ... But even in such a case it might be rash to jump to the conclusion that all our enthusiastic fellow tourists had been brainwashed by clever travel agents ... The fault may lie with us ... As soon as we even consider this possibility, we have ceased to be complete relativists and subjectivists. We have sided with tradition against our own reactions ... we may feel that as far as the peaks of art are concerned, it is not so much we who test the masterpiece, but the masterpiece which tests us ..."

My position is that although, to use Marriner's (1999) terms, meaning is "relational" rather than "inherent", an over-arching notion of good art is conceivable. I argue that original creations, although potentially differing from all existing creations, are made within traditions and can be judged in relation to the best examples – Gombrich's (1979) "touchstones of excellence" – in these idioms. I refer to Bourdieu's (1996) concept of "consecrated" art to denote any art serving as a touchstone, any art given legitimacy or status as fine art by an institution of fine art. My position is between the poles of essentialism and social construction. This position has shaped the current study in that it has led me to expect the privileging Western European traditions at schools studied and to investigate particular ways in which these approaches are appropriated at schools studied. Curricula at these schools are considered in relation to secondary school art curricula in general.

2.11.3. Secondary school art curricula

There are different versions of art at secondary school level (Fuller 1990; Karpati 1995; Eisner 2002; Chalmers 2004; Elfland 2004a; Stankiewicz et al 2004; White 2004). These curricula can be shaped by social and economic trends (Karpati 1995: 278; Stankiewicz et al 2004: 42-48; White 2004), as can be seen in shifts identified in art curriculum foci over the course of the twentieth century in the United States (Chalmers 2004; Elfland 2004a). These shifts include a "beginning" phase early in

public school art education, of art as "drawing" and "craft" skills for refinement; a "progressive movement" of art as "creative self expression"; a mid-century phase after the Great Depression, of art as used in "everyday life"; and a late-century phase where high skills were sought, of "discipline-based art education" (DBAE). Art as a disciplined body of knowledge includes skills for high quality art production; art criticism; study of art in historical and cultural context; and aesthetics (Eisner 2002: 26-28). Further types of art curricula have been identified, namely, "visual culture" where a broad range of types of art are regarded as texts for analysis; "creative problem solving" especially in the design field where technically efficient and aesthetically pleasing products are sought; "preparation for the world of work"; and "art as cognitive development" through use of complex modes of thought such as metaphor (Eisner 2002). It has been shown that curricula can be hybrid rather than occurring in the pure forms described above (Eisner 2002: 25), and that they can differ across schools within a single region and time period (Fuller 1990: 195; MacGregor 1990: 323)[9]. It is evident from these descriptions that school art is more strongly framed or tightly bounded than art in the art-world.

Despite or perhaps because of the existence of different art paradigms, there are calls to distinguish core values for art education (see Hope 2004: 97; Smith 2004: 87), to establish shared criteria (see Barrett, 1990, p.302-3, 310-12; MacGregor, 1990, p.323-4; Hermans, 1991, p.79; Macdonald, 1991; Davies, 1992, p.72; Blaikie, 1994, p.304; Steers, 1994, p.291; Cannatella, 2001, p.321-2). The complexity of criteria is also attested to (Barrett, 1990, p.302; MacGregor, 1990, p.324; Davies, 1992, p.73; Blaikie, 1994; Cannatella, 2001, p.326), as is the need to make criteria explicit (Schonau, 1991, p.85-6 and 1999, p.186; Davies, 1992, p.73 and 1996, p.329, 331). As Hope (op. cit.) points out, definition of content and purpose to distinguish school art is a matter of its survival. I argue that if all learners are to have equal access to significant disciplinary knowledge, core values worth accessing need to be delineated.

[9] Fuller (1990: 195) provides the example of two contemporary British schools, one a "mixed comprehensive" at which art and design are part of creative studies where the emphasis is on craftsmanship and imaginative use of materials. He contrasts this comprehensive with a 'leading public school' with a tradition of learning and scholarship, where the emphasis is on understanding of pictorial language and appreciation of masterpieces, and constant talk about art and exercising evaluative judgment is encouraged.

The basis of core values could be extrinsic or intrinsic to the field. While there is some evidence of the value of the arts for non-arts cognition, this evidence is not compelling (Hetland and Winner 2004; Smith 2004: 89). Other extrinsic bases for art curricula include the usefulness of the arts for the world of work; and art education for what Burton (2004: 556) refers to as Chapman's 'enlightened citizenship'. While I do not question the importance of preparing learners for the world of work, I acknowledge with Cannatella (2001: 324) that a functionalist approach may not emphasise values intrinsic to art. What then constitutes value intrinsic to art?

It has been suggested that the arts develop aesthetic sensibility[10], refining individuals' creative, perceptual and reflective capacities (Smith 2004: 89) or cognitive, perceptual, reflective capacities (Burton, drawing on Gardner 2004: 557); afford aesthetic experiences in processes and products (Eisner, 2002, p.81); and provide deliverance from "mundane world views" (Gee, 2004, p.132). Other suggested core features for secondary school art, in addition to a sense of the aesthetic, include acquisition of studio technique (Hermans, 1991; Eisner, 2002, p.81, 183; Hope, 2004, p.101-2) and cultivation of the imagination or "imaginative cognition" (Eisner, 2002, p.82; Elfland, 2004b)[11].

Evaluation criteria based on core curricular values extrinsic to art would be shaped by features external to art. The question arises as to the nature of evaluation criteria when school art curricula focus on values intrinsic to art.

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10 While the privileging of aesthetic experience, value and judgement has been challenged as euro-centric (see for instance arguments in Clarke 1996; Carrier 1997: 2, 21; Smith 2004: 90), counter-claims to these accusations have been made by pointing to the pre-occupation in Chinese and Indian art, with art for its own sake (Smith 2004: 90-91, drawing on Blocker 2004). Further, there are ways in which the aesthetic can be incorporated into multicultural arts education (Blocker 2004).

11 Eisner's (1998) and Elfland's (2004a: 769) idea of imagination differs from the "creative expression" of twentieth-century progressive teaching and nineteenth-century romantic self-expression. Elfland (2004a: 757) defines "imagination" as the power to form mental images of features or ideas not yet experienced, through re-organisation of previous experiences. He (ibid.: 756) uses the concepts of "cognition" or construction of meaning; "cognitive flexibility" or the ability to select and match appropriate strategies for knowledge acquisition across differently-structured domains; and Lakoff (1987) and Johnson's (1987) "cognitive schemata" or "image schemata" - cognitive structures conceptualised from a variety of images or bodily perceptions – to explain the part imagination plays in cognition. According to Elfland (2004a: 760-1), higher-order cognitive structures can be developed and extended through "metaphoric projection", or the "mapping" of image-schemata from a "source domain" (bodily experience) to a seemingly unrelated "target domain" whereby the attributes of the initial domain are applied to the latter. Cognition thus has imaginative attributes (ibid.: 766).

2.11.4. Specific evaluation criteria for secondary school art

Interestingly, an initial scan of the literature on assessment in art showed a focus in most articles on issues other than assessment criteria *per se*. There is emphasis on issues of subjectivity and different assessment procedures or models and their consequences (see for example Barrett 1990; MacGregor 1990; Schonau 1991 and 1999; Hermans 1991; Davies 1992 and 1996; MacDonald 1993; Karpati 1995; Yorke 1996; Cannatella 2001); lack of definition of or a need for explication of criteria (see for example Hermans 1991; Davies 1992); deconstruction of "normal" art classroom discourse and learner identity (Mitchell 1996; Atkinson 2001); the importance of theoretical underpinnings for art curricula and assessment criteria (MacDonald 1991; Abbs 1992; Brookes 1992; Hughes 1993); and teachers' underlying values (for instance Gray and MacGregor 1991). I posit that these foci result from and are responses to the "weak" (Bernstein 1996; 2000b) or "ill-structuring" (Elfland 2004b) of art as a form of knowledge.

Eisner (2002: 178) points out that the awkwardness of the relationship between art and assessment is based on practitioner-perceived differences between the two processes, with art-making being seen as emphasising process and individuality, and assessment as focusing on outcomes and standardization. Art is often regarded as unteachable (Eisner 1989: 158; Davies 1992: 74) or as placing a premium on qualities that cannot be quantified (Eisner 2002: 178); assessment is seen as an impediment to creativity (see for instance MacGregor 1990: 324; Eisner 2002; Soep 2004: 579). Art is alternatively seen as being teachable but without a compatible evaluation system (Eisner 2002: 178) or system that provides evidence of achievement (Eisner 1989: 158). With Eisner (2002: 179), I argue that antipathy between creativity and assessment is unsustainable if the professional responsibility of teachers is to be maintained. With MacGregor (1990: 325), I assert that descriptors of evaluation criteria, delineation of "formal, analytic, interpretive and technical aspects" of learners' work can serve to open teachers' and learners' eyes and expand rather than restrict their ideas as to the possibilities of the art curriculum.

The issue of subjectivity in artistic judgement features in most discussions of assessment and while some have argued that judgements are "objective but multi-

layered" (Davies 1992: 74), there have been many efforts to theorise around subjectivity (see for example Barrett 1990; Davies 1992; Steers 1994; Cannatella 2001) and manage it (for instance MacGregor 1990; Schonau 1991 and 1999; Blaikie 1994). One of the tasks of the present research is to sketch the play of subjectivity in artistic judgement and ascertain the existence and extent of patterns in these judgments.

Despite the play of subjectivity, similarities of judgement have been found within contexts (MacGregor 1990: 324; Schonau 1991: 83). In reporting a two-month investigation into art assessment practices in England, Holland, Wales, and Scotland, MacGregor (1990: 323) also familiar with assessment in Canada and North America, notes the closest approximations to national curricula as being in Scotland and Holland; art curricula in England being regional and in Canada, provincial. He (ibid.: 323) relates efforts made by assessment authorities and art educators in Britain and Holland to develop agreed-upon descriptors for grades awarded. He describes (ibid.: 324) how assessors agreed that the artworks of thousands of learners were sufficiently similar to be awarded C grades on the basis of descriptors such as candidates' "skill to establish satisfactory relationships within organisational aspects of the work"; "sufficient self-awareness to make limited response in a sensitive, imaginative manner"; possession of "a degree of acquired skill and competence"; and "evidence of an ability to research and select information ...". He (ibid.) explains that assessor's general agreement is based on their practice of searching for common patterns "which is the only way one can deal with large numbers of products over a short period of time", and tacit understanding of criteria. MacGregor (ibid.) also reports the "Advanced Placement" programme examiners' contention that there is little discrepancy in assessments on a 1-5 scale, of portfolios made for AP programmes operating in schools across North America. MacGregor's (1990) assertions, while important for the current research, appear to be based on personal observation rather than systematic exploration. Schonau (1991: 83) in contrast, in measuring evaluators' judgments and administering a structured task to these judges, found that when a jury of between three and five persons evaluated art-works in a national studio examination in Dutch secondary schools using set criteria on a scale of '1' to '10', judgements differed at first but with time there was an 80% overlap.

I posit that in the literature on assessment in art, described sought-after criteria can be grouped into four broad categories namely, 'demonstration of creativity, originality, or use of the imagination', 'technical competence', 'conceptual content, ideas, feeling, expressivity', and 'ability to criticise art/make visual analyses', with aesthetic sensibility potentially pervading all of these areas (see Appendix 3).

In teaching-learning contexts artistic judgements are continually made in formative and summative assessments, almost all of which are conventionally verbal. Teachers' judgements have traditionally been like 'laws' in the assessment of art. Taking part in art discourse at tertiary-level involves according to Mitchell (1996: 152), teachers' and students' participation in its arguments and realising consensus and exclusion. Mitchell (ibid: 146-153) shows how tertiary-level students can, by participating in abstracted, generalised fine-arts discourses, appropriate officially sanctioned discourse and establish identities of equality with teachers. On the other hand, students failing to rise above the narrative and particular find themselves excluded from specialised fine-art discourses. It is expected that a parallel process of participation and exclusion is played out at secondary school level. Exclusion not only serves to bar access to significant art knowledge, but as Davies (1996) notes, it can be humiliating. An approach in which evaluation provides learners with clear criteria opens the way for participation (Cunliffe 1999: 119-120) and is of great importance if all learners are to have equal access to significant knowledge in the discipline. The current research attempts to explicate evaluation criteria privileged in art classes in the region studied, and the degree to which socially different learners realise these criteria.

2.11.5. Achievement criteria in the current research

Secondary school art in South Africa is located broadly within the Western European tradition. The vagueness of official curriculum documents makes differences between curricula across schools possible. Art teachers can teach what they want to teach, provided that the resulting content is suitable for and used to create exhibitions for evaluation at the end of the twelfth and final year of school. Although criteria are nowhere elaborated, evaluation of final exhibitions, after having been graded independently by three individuals, includes moderation by senior administrative officials moving across schools for consistency as described in Chapter 1. In order to establish the existence or otherwise of shared criteria in use and access to these

criteria by different groups of learners, it is necessary to interrogate assessment discourses (Atkinson 1999 and 2001). I recruit evidence from two sites to delineate evaluation criteria in use in the researched context. These sites have been selected to make possible description of achievement in terms of Bernstein's (1996; 2000a) concepts of "recognition" and "realisation".

One site from which data are collected to measure achievement is the moderation process at which learners' final exhibition grades are awarded. In the absence of written criteria, the moderation process is seen as a potential site for the elaboration of criteria. Learners' exhibition grades represent their realisations of appropriate texts. Another site at which data are collected is a judgment task administered to map learners' artistic judgments. Comparison of learners' judgment patterns with those of their evaluators is expected to show the extent to which learners' recognise qualities sought after by individuals evaluating their work. Drawings have been selected for the judgment task because, apart from being relatively simple to grade (Davies 1992; Atkinson 2001), drawing is taught and learned in all school art courses in South Africa. Not only is it possible to identify generally shared sought-after criteria for this art-form (Dinham 1989), but knowing that learners are familiar with it makes it possible to investigate their demonstrated knowledge of it in relation to teaching they have experienced, in a non-reactive way.

2.12. Chapter summary

In this chapter I review the literature within which I situate the current study, and discuss the theoretical underpinnings of all aspects of the research.

I begin the review by examining literature to ascertain the relative importance of social context and pedagogy for learner performance. I find that social context has over-riding importance for learners' achievement but also that there is variation in performance at socially similar schools. Further, the effects of educational processes on learner achievement are greater in developing than developed countries, and for minority-group learners as opposed to learners from other social groups. South African research into factors associated with high achievement at socially similar schools yields varied findings: in some cases teacher qualities are associated with

achievement; in other cases school-level features play a very small role in explaining variation in achievement. South African literature examining pedagogy in relation to achievement considers classroom features such as teacher-learner ratios, teacher experience, teacher training, language of instruction, and teaching resources: there is very little detailed research into pedagogic practice.

I go on to review contextual features considered in relation to learner performance and select that of social class for detailed investigation in the present research. I review research into pedagogy and achievement, and find support in the literature for teaching styles comprising a mix of elements considered traditional and progressive. A problem with the teaching style literature is that social context is not taken into account: there is an assumption in this work, that teaching affects all learners equally.

I situate the current research within a small cluster of studies conducted mainly in Portugal, into relations between social class, pedagogy, and achievement in science. This research consistently finds specific pedagogic features associated with success for learners in general and socio-economically disadvantaged learners in particular. The researchers involved point to a need for further similar studies, focusing on different geographical areas and school subjects, and utilising different methodologies. The present research intends to build on these studies by exploring relations between social class, pedagogy, and achievement in *art* in South Africa. It utilises the theoretical framework underlying the Portuguese studies namely, Bernstein's theory of pedagogy. This theory facilitates analysis and relation of macro social and micro-pedagogic features, and analysis of pedagogy at a level of abstraction sufficiently general to describe all categorisations of pedagogy encountered in the literature.

The chapter goes on to delineate theories underlying social class, race and achievement in art. Wright's (1997) theory of class is used for its high degree of explanatory power with respect to inequality. Since Wright's model is based on economic capital and the research focuses on art, Bourdieu's (1984) notion of cultural capital and associated educational classifications is superimposed on Wright's model. The concept of race is seen as a social construct, and common understanding of the idea in South Africa utilised in the study.

The concept of achievement in art is described in the context of views in the art world and secondary school art education in general. Bernstein's (1996; 2000b) theory of knowledge is used to explain art as a form of knowledge. Modern and post-modern approaches to art are discussed and I outline my position as lying between the poles of essentialism and constructivism. I draw on Gombrich's (1979) notion of the canon as a means to counter relativism. I discuss the existence of different curricula at secondary school, and note a call in the literature to establish core criteria. I outline some evidence for consensus around evaluation criteria, and conclude with a description of how I intend to investigate sought-after criteria in the current study.

In the following chapter I describe my research design, including the overall plan of the study, procedures by means of which samples were selected, and methods used.

CHAPTER 3

RESEARCH DESIGN

This chapter explains how the study has been designed to answer the question:

> What, if any, are the specific pedagogic features associated with achievement in matric art by learners in general, and socially disadvantaged learners in particular?

Exploring relations between the social positions of learners, pedagogy, and achievement in art, required three different data sets. First, since the significance of particular contextual features for achievement in art was not known at the start of the study, data on the commonly considered features of social class, race and gender was needed to establish the existence of patterns between these features and learners' performance. This exploration required as large a sample as resources permitted. Second, rich data was needed for fine-grained description of pedagogy, much of which was based on the verbatim speech of teachers and learners. Given that I conducted the research on my own, this kind of detail could only be collected in a relatively small sample. Lastly, data on learners' achievement in art was sought - achievement described in terms of Bernstein's (1996: 31-32) concepts of recognition and realisation. While percentage grades (signifying realisation) could be collected for large numbers of individuals, *what* learners were recognising required probing.

Multiple methods have been used for gathering the three data sets and analysing relations between them. If design is conceived as Marshall and Rossman's (1999: 62) overall plan or "road map" for the conduct of a research, the present study could be described as a "multi-method" investigation (Miles and Huberman 1994: 42; Brewer and Hunter 1989). A survey of learners' social class, race, gender, and percentage grades, and statistical analysis of this data was used to identify patterns between learners' grades and their social class, race, and gender characterisations. Following this exploration, achievement levels in school classes of socially similar learners were compared using further statistical analysis. Lastly, on the basis of this analysis a sample of six school classes was selected for in-depth case study of pedagogy and learners' achievement.

The design just described differs from designs in studies on which the present research hopes to build (see for example Domingos 1987; Morais et al 1992 and 1995) in that the earlier investigations were more deductive, devising pedagogic practice from theory, teaching this pedagogy to teachers, monitoring implementation of the pre-determined practices, and measuring the resulting associated learner achievement. The current study works more inductively, exploring existing practice with the intention of describing pedagogy generally associated with high achievement levels on the basis of findings with respect to six particular cases.

In this chapter I present my motivations for the use of multiple methods and focus on a multiple case study. I then give a design overview. Third, I describe processes by means of which the samples for the survey and case study were chosen. Fourth, I sketch the six cases selected for detailed study, and their contexts. I close this chapter with description of methods used for gathering data on pedagogy.

3.1. Use of multiple methods

Descriptions of combinations of methods are various but share allusion to the practice of drawing on methods across approaches traditionally described as quantitative and qualitative. Delineation of four conceptions of combination is sketched for positioning of the current study.

One conception of use of multiple methods has been expressed as "triangulation", an approach developed intensively by Denzin (Marshall 1996: 539). Triangulation generally involves "complementary multiplism" (Krathwohl 1998: 620) or use of multiple methods and data in relation to the same phenomenon; Denzin's definition (in Brannen 1992: 11-12; in Fielding and Fielding 1986: 24-25; in Mathison 1988: 14) included multiple investigators, theories, repetitions of procedures over time. With triangulation the "robustness" or validity of data is ensured by counteracting the "fallibility of single measures" (Fielding and Fielding 1988: 29; see also Bryman 1988: 131-4; Krathwohl 1998: 620). In a contrasting view of triangulation, contradictory as well as convergent data is accumulated and needs to be rendered sensible by researchers (Mathison 1988).

Hybrid research forms have also been described in terms of the pre-eminence and degree of integration of constituent methods (Bryman 1988 and 1992; Cresswell in Punch 1998: 250; Punch 1998: 246). In one of three models devised by Bryman (1988: 134-42), qualitative research facilitates quantitative study, preceding the latter as a source of hunches to be tested or from which instruments are developed. In a second model, quantitative procedures such as surveys facilitate qualitative investigation by "mapping" phenomena to be addressed and aiding judicious selection of research samples (ibid.). A third combines distinct but linked qualitative exploration and quantitative study (ibid.). Cresswell's schema (in Punch 1998: 250) is congruent with Bryman's, adding a fourth type of design in which methods are mixed at all stages of the research; Punch's (1998: 246) four interpretations of "combination", "integrating", "linking" "adding" and "interweaving" sums up both conceptions.

A third conceptualisation of combination links use of quantitative and qualitative methods in time (Miles and Huberman 1994: 41-2). In this scheme one design involves continuous, integrated data collection and another, continuous qualitative fieldwork with periodic "waves" of quantitative survey. In a third design initial and ultimate qualitative exploration is punctuated by a quantitative questionnaire and in a fourth, quantitative survey and experiment by qualitative fieldwork.

Lastly, combinations of methods have been placed on continua with quantitative and qualitative poles, each type of approach described in terms of components varying independently of each other (Hammersley 1992; Krathwohl 1998). Components identified include data, research settings, research-focus, mode of reasoning, epistemological positions (Hammersley 1992: 41-51); research design, research purpose, and treatments administered to subjects (Krathwohl 1998: 21-35).

Brannen's (1992:12-13) description of assumptions underlying multi-method approaches as "integrationist" or "complementary" is useful for conceiving combinations of methods at paradigm-level. In the former, data generated by different methods is integrated into a "unitary picture"; in the latter its component subsets are treated as distinct and complementary. The present research uses quantitative and

qualitative elements in a complementary way, but also includes 'moments' of integration.

3.2. The current study

The current research adopts a frequently advocated pragmatic approach where methodologies are chosen to address particularities of the research question (Merriam 1988: 32; Miles and Huberman 1994: 5; Cresswell in Strauss and Corbin 1998: 30; Punch 1998: 67; Shavelson and Towne 2003: 62). With Miles and Huberman (1994) I see the quantitative-qualitative distinction as a misleading dichotomy, that as methods they are not interchangeable but complementary. I however use the terms 'quantitative' and 'qualitative' for description of types of data, methods, and findings, in that they carry features and connotations of the traditions from which they arose.

The overall design of the present research is most aptly described by Bryman's second hybrid in which quantitative study facilitates qualitative exploration, although there are quantitative and qualitative aspects throughout the study. A survey was used to identify social class patterns in learners' achievement, "what" and "how many" patterns (Merriam 1988: 9), and to facilitate selection of a criterion-based sample for in-depth study of "how" and "why" patterns (ibid.).

3.2.1. Rationale for mixing methods in the current study

Using methods arising from quantitative and qualitative traditions enables harnessing the relative advantages of each (Brown and Dowling 1998: 82-3; Krathwohl 1998: 619-21): the narrow focus, consistency, transparency, "precision" (Brown and Dowling 1998: 93) of the survey and task; the rich contextualised descriptions of the case study. Qualitative methods facilitate "categorisation" (Qureshi 1992: 120-1) of the phenomena of pedagogy and achievement, an "analytic approach" to "understanding a few variables" (Salomon in Miles and Huberman 1994: 41): they make capturing the richness of these processes possible. Statistical analysis is useful for uncovering associations between variables (Qureshi 1992: 120-1), a "systemic" approach to understanding relations between contextual feature and achievement variables, or variables in a "complex environment" (Miles and Huberman 1992: 41).

As Brannen (1992: 16) rightly claims, combining methods potentially broadens and deepens study.

There are episodes of integration or triangulation or "interweaving" (Punch 1998: 246) in the current study, in methods used to collect data on both social class and achievement (see Table 3). Parental occupation and education information obtained through standardized social class questionnaires was complemented with specific detail sourced in semi-structured interviews with learners. A task was administered to gather data on learners' artistic judgments, and learners' percentage grades collected to measure their ability to make art, both of which were quantitative strategies. Semi-structured interviews were again conducted with learners to obtain richer detail than the task afforded, and with evaluators to obtain detailed descriptions of skills represented by numerical grades. There were quantitative and qualitative elements in data collection methods, types of data collected, modes of analysis used, and findings (see Table 3 below).

Table 3: Quantified and qualitative elements in the current study

Research component	Quantified elements	Qualitative elements
Data-collection method	1. Survey using questionnaire for learners' social class detail 2. Administration of task and gathering of final percentage grades to measure learners' achievement	1. Semi-structured interviews with learners to clarify social class details given in the survey questionnaire 2. Semi-structured interviews with learners and examiners to investigate their judgments when doing the task administered; semi-structured interviews with moderators to explore the meaning of grades awarded 3. Non-participant observation of pedagogy using audio-recordings, fieldnotes, and interviews with teachers for information on practice over extended time
Type of data	Data for social class, learners' achievement, and pedagogy converted into coded numerical form	Descriptions of parental occupations and education for learners' social class; verbal descriptions of learners' achievements; teacher-learner interaction transcripts, and field- and interview notes for pedagogy
Mode of analysis	Descriptive statistical analysis of relations between percentage grades and learners' social class, race, and gender respectively; between learners' percentage grades and artistic judgements; and percentage grades in different school classes	Matrix analysis of relations between specific pedagogic features, learners' achievement, and social class (see Chapter 6)
Type of finding	Numerical and graphic representations of levels of achievement in different school classes and learners' achievement in relation to their social positions	Descriptions of pedagogic features associated with achievement for specific types of learners; posited explanations for high achievement levels

3.2.2. Rationale for focusing on a multiple case study

There are several reasons as to why a case study method was used to gather data on pedagogy and achievement, namely:

- First, case studies are the preferred approach for detailed exploration of processes in context (Merriam 1988: 165-6).

- Second, case studies have potential to reveal complexity (Cohen and Manion 1980: 43; Merriam 1988: 165-6; Miles and Huberman 1994: 10), offering "a means of investigating complex social units consisting of multiple variables" potentially important for understanding phenomena and "a rich and holistic account" of these phenomena (Merriam 1988: 32).

- Third, studying cases in detail is a good strategy for identifying variables not yet known or defined (Miles and Huberman 1994: 10) or those associated with loosely defined curricula (Cohen and Manion 1980: 43), as is the case for pedagogy associated with art teaching and what constitutes achievement in art.

- Fourth, case studies focus on naturally occurring events in natural settings "... so that we have a strong handle on what 'real life' is like" (Miles and Huberman 1994: 10), real as opposed to stated goals (Cohen and Manion 1980: 43), and lived experience of phenomena (Marshall and Rossman 1995: 39). This quality was important for the research goal of identifying types of pedagogic features learners had experienced.

- Fifth, observation is the method of choice for gathering data on non-verbal behaviour (Cohen and Manion 1980: 103-4) such as that found in art classrooms.

In all, extending observation, in context, over sustained periods, and exploring with triangulation the realities of different agents, are expected to provide multi-dimensional "internally valid" images (Merriam 1988: 166-7) of the pedagogy and achievements under focus. Attempts have been made to incorporate a "chain of

evidence" possible to be followed and assessed by those not present to observe (Anderson 1993: 163). This unfolding evidential chain is intended to facilitate the twin research aims of developing a hypothesis of pedagogic features associated with high levels of achievement in art and testing whether these features are similar to the set of features linked to achievement in science (see Morais et al 1992).

Utilising a multiple as opposed to a single case study is a response to one of the criticisms levelled against the case study approach, that generalisation is not possible on the basis of one case, that the issue of external validity is not easily addressed (Anderson 1993: 163). On one hand it has been argued that it makes no sense to expect sample-to-population generalisation from a single purposefully chosen case, for which understanding of the particular is the goal (Merriam 1988: 173). On the other hand, multi-case or cross-case analysis with use of sampling, predetermined questions, and specific explicit procedures for coding and analysis can enhance generalisability in a traditional sense (ibid.).

In the current study I use three pairs of school classes, pairs differing according to social class, for analysis of relations between pedagogic features and achievement (see Section 3.5 below) in the expectation that achievement contrasts or patterns found in one pair might be repeated in the other two, potentially increasing generalisation. Although I did not go so far as to seek *causes* of whole-class high achievement in art, I argue that examining similarities and differences across three pairs of classes might provide stronger evidence of features associated with achievement than is possible with a single case study. As Anderson (1993: 164) suggests, "... The extent to which generalisability is possible will relate to the extent to which a case is typical ... Multiple cases can sometimes provide such a base ...".

3.3. Criticisms of mixed methods

Three criticisms commonly made of the mixing of quantitative and qualitative methods are worth mentioning. One obstacle raised is the supposed incompatibility of epistemological assumptions underlying the two approaches, quantitative methods being associated with "positivist" and qualitative methods with "interpretivist" traditions (Bryman 1988: 153; Brown and Dowling 1998: 82). Others (for example

Hammersley 1992; Qureshi 1992; Miles and Huberman 1994: 5; 41) have argued that differences between the traditions are blurred. Hammersley (1992) has for instance conceived of a realist-idealist continuum for different components of research. He shows (ibid.) that there is not necessarily a relation between epistemological position and other aspects of research such as the degree of precision of data, the extent to which settings are natural or artificial, the direction of focus on meaning or behaviour, and the extent to which procedures are deductive or inductive. Hammersley (ibid.) points out that it is possible to take up differing positions on the realist-idealist continuum for different components of research.

A second objection to the combination of approaches is that they differ in their goals. Quantitative research is seen as focussing on discovery of laws and qualitative study on identifying cultural patterns (Qureshi 1992: 49). This view can be countered with the argument that much quantitative research, especially surveys, is concerned with description, and that the goal of some qualitative work is theory (ibid.).

A further two conceptions doing away with dualistic opposition of research goals are similarly useful. The first is Wallace's (1979) notion of the scientific process as a flexible cycle of theoretical, hypothetical-deductive, observation, empirical-generalisation and inductive phases. In this view, research that explores given phenomena on one hand or tests hypotheses on the other manifests variability in the formalisation and integration of phases in the cycle. O'Connell's (1994) idea that distinctions between theory construction and testing begin to erode once categories have emerged from qualitative data collection and processing, is consistent with Wallace's notion.

Popper's (1979) claim that theoretical and generalising sciences make use of the same method of "hypothetical deduction" also does away with a dualistic conception of research goals. According to Popper (ibid.: 18-19), scientific research is always concerned with explanation, prediction, and testing. "Explanation" constitutes finding the conditions of laws, "prediction", the making of hypotheses on the basis of laws, and "testing", the comparing and contrasting of experience with scientific law. In this view the testing of theory is important, not whether testing is deductive or inductive.

Accusations of "eclectic opportunism" constitute a third criticism of the combination of methods. With Bullock et al (in Brannen 1992: 86-7), I assert that "eclectic" is only undesirable when ad hoc selections of methods are mixed for convenience, but is far from undesirable when the best features of different approaches are chosen for their apparent appropriateness, as was the case in the present research.

Since the multiple case study formed a large part of the present research, criticisms of case study methods as well as ways in which these criticisms were addressed are discussed briefly.

3.4. Limitations of the case study approach

The limitations of the case study approach –limits of generalisability, reliability, and validity (Cohen and Manion 1980; Merriam 1988; Anderson 1993; Miles and Huberman 1994) – are addressed here.

3.4.1. Generalisability

In a case study, generalisability is not to larger populations or "universes", but to existing or new theoretical propositions (Miles and Huberman 1994: 27-30): the most useful generalisations from qualitative studies are "analytic" not "sample-to-population" (ibid., drawing on Firestone 1993). I use a moderately sized sample of six teachers and their final-year art classes, these having been purposively chosen on the basis of characteristics shown in the survey. The representivity of these teachers and classes is an open question, but can be argued on theoretical grounds. I want to tackle the big picture of learner achievement in relation to social class as well as pedagogy. I need fine detail on pedagogy and individual learners' competences since I am looking for specific pedagogic features linked to success for socially specific types of learners. Selecting the school classes for detailed study on the basis of their fitting social class and achievement patterns in the survey was conceptual: theoretically it is expected that comparing pedagogy across socially similar classes achieving at different levels will show pedagogy linked to success for learners in particular social positions.

Multiple case sampling adds to the confidence of findings (Miles and Huberman 1994: 29). If patterns hold across the pedagogy of the six teachers and the

achievements of the six school classes, the findings will be more stable and robust than if they are found in one or two classes: using multiple cases is a replication strategy to vindicate claims of validity of insight and reliability of inferences. My research shows pedagogy linked to specific levels of achievement in six school classes. All procedures for data collection and analysis have been theoretically driven and documented, and have relevance for future research into relations between social class, pedagogy, and achievement.

3.4.2. Reliability

A second criticism of case study methods is that they lack reliability (Anderson 1993: 163), that data gathered are subjective, biased, impressionistic, idiosyncratic and lacking in precisely quantifiable information (Cohen and Manion 1980: 104). I have used various strategies to enhance the reliability of my study. One is triangulation (Anderson 1993: 163; O'Connel 1994: 53-5): I tried to enrich data by collecting the same information in different ways and from different sources. Some examples of this strategy include: interviewing all 763 surveyed learners to corroborate and flesh out responses they had noted on questionnaires; interviewing learners to ascertain reasons for their numerical responses to an achievement task, and moderators to establish descriptions of particular grades awarded; audio-recording as well as making fieldnotes of classroom interactions; and interviewing as well as observing teachers on their pedagogic practice.

I used other means of increasing reliability namely, that of theoretical organisation of data collection and analysis (Anderson 1993: 162; Miles and Huberman 1994: 278; Ensor and Hoadley 2004). Data on social class was collected to fulfil categories in Wright's (1997) theory of social class. This theory, requiring precise information on ownership and authority levels as well as skill qualifications and levels in parental occupations, resulted in collection of far more systematic data than would have been assembled without theory. Data on pedagogy collected through audio-recording and note-taking, being continuous, is fairly reliable. Attempts were made to further enhance the reliability of this data by ensuring that there was sufficient information to cover all categories in Bernstein's (1996; 2000b) theory of pedagogy, this theory serving to systematise note taking on pedagogic practice. Data on achievement, being primarily numerical, were collected systematically.

Bias was less likely to manifest in the systematic collection of data or continuous data, than in the selection of texts for analysis and display. For this reason efforts have been made to include representative samples of text, make selection and coding principles theory-based and explicit (see Chapters 4 and 5), and base all analyses on displayed, coded data (see Chapter 6). Steps to enhance the reliability of coding also included giving samples of data and coding protocols to other researchers to check, and using any emerging inter-rater inconsistencies to further clarify coding procedures and categories.

3.4.3. Internal validity

A third criticism of case study research is the question of internal validity, or the degree to which the study is an "authentic portrait" of what is studied (Miles and Huberman 1994: 278) and not one unethically or inadvertently biased by the researcher (Merriam 1988: 33-4).

Use of reliability-strengthening measures such as triangulation, making biases introduced by theory and selection from continuous data explicit, creating an "audit trail" of methods and procedures followed, and of decisions taken and of reasons for these decisions (Lincoln and Guba 1985: 283) were also intended to enhance validity. I came to the grades 'cold' in that I did not know at the start of the research, which pedagogic factors might be linked to success. To avoid personal bias I adopted Bernstein's (1996; 2000b) theoretical framework and explicit precedents regarding its use (see for example Morais et al 1992; 1995) to partly structure data collection. To avoid theoretical bias in coding I made an effort to move between existing categories and my data, documenting and displaying the process in detail. This adaptive process was a considerable undertaking designed to capture something of the authentic complexity that is art education.

3.5. Design overview

The current study has two parts, the first being a survey to investigate patterns in learner achievement in art in relation to their social class, race and gender. The second part of the research is a multiple case study of pedagogy and achievement in a sample

selected purposively on the basis of patterns found in the survey. The case study is of six teachers and their classes, the classes being broadly similar in social ways key to patterns found in the survey but achieving at different levels. The study has been designed to address four questions, each based on findings relating to the question preceding it. The questions are as follows:

1. Are there patterns of achievement with respect to final-year learners' percentage grades and their social class, race and/or gender?
2. If learner performance is patterned in relation to social position, do individual school classes of learners in similar social positions achieve at similar levels?
3. If learners in similar social positions achieve at different levels in different school classes, are there sets of pedagogic features associated with high achievement?
4. If there are specific pedagogic features associated with high levels of achievement in art, are these features similar to those linked to success in science?

Data collected from the survey of fourteen schools is used to answer the first two questions, and data gathered for the case study the third and fourth. While part of the survey necessarily preceded the detailed study, time constraints meant that the case study (classroom observation, audio-recording, fieldnotes, interviews) and confirmation of initial large-group trends (waves of surveying cohorts of final-year art learners)[12] were carried out simultaneously (see Tables 4 and 5). In other words statistical analysis of one round of survey data showed social-class patterning in art achievements, cases were selected on the basis of these patterns and carried out over the following three years, with a survey of contextual features and grades done with final-year learners each year. This structure lent the design an "ex post facto" logic (Brown and Dowling 1998: 41-2; Merriam 1988: 7), where investigation focused on pedagogic features that might have had an effect on percentage grades *already achieved* by learners. Pedagogic features were categorised 'after the fact' of specific achievement patterns identified in the grades of the initial cohort of final year learners, but importantly: achievement levels in case study classes remained relatively

[12] Confirmation of patterns between learners' percentage grades and their social class, race and gender over four successive years was part of the attempt to increase the reliability and validity of the study, and was essentially 'temporal' triangulation (Denzin in Fielding and Fielding 1986: 25).

constant over the four years of the research (see Figure 7 and Table 18 in Chapter 6). A summary of this research design is given at the end of this chapter (see Figure 1).

The case study is an "interpretive" or "instrumental" one (Punch 1998: 152), using descriptive data to originate and shape conceptual categories to develop and test the hypotheses that specific pedagogic features are associated with achievement. It has been constructed to reveal pedagogic features associated with achievement through conceptually clustered matrix analysis (Miles and Huberman 1994: 127). The Art classes of six teachers were the minimum number required for the matrix analyses: one high- and one low achieving class for each of three social class levels (see Table 6 below). This scheme, although dealing with associations rather than causes, fits Cohen and Manion's (1980: 145) "criterion-group ex post facto approach" in which the goal is to discover possible causes for phenomena by comparing subjects for which the variable is present, with similar subjects for whom it is absent. Pairs of socially similar school classes constitute criterion groups, the units in each pair differing with respect to possession of the dependent variable, high percentage grades.

An attempt has been made to represent the 'whole picture' of the research in terms of the constituents of its design: all school classes surveyed and studied in detail, and to which tasks were administered over the four years of the study, and from which data was obtained for analysis are presented in Table 4. An 'S' indicates school classes surveyed for social class, race, and gender detail, and for which final-exhibition percentage grades were collected. Numbers of classes surveyed changed as teachers left schools, or school classes were added to maintain spread of a range of demographic features. An 'O' represents school classes observed and for which audio-recordings and fieldnotes were made, and teachers interviewed. Only observations from which data were obtained for analysis are shown in the table. A 'T' is added for school classes to which a task assessing learners' aesthetic judgments was administered. Tasks piloted in the first two years of the study are not represented in the table. Symbols for school classes making up the sample for the multiple case study are shown in red.

Observing pedagogy over the course of an entire art project for each teacher in the detailed study meant attending between ten and thirty lessons strung out at times over

whole school terms. Fitting in with teacher and school timetables meant that these observations were carried out in three different years, while the achievements of individual learners were explored in a single cohort of final-year individuals (see 'O's' and 'T's' in Table 4). It is a weakness of this study, that pedagogy associated with achievement levels is sought, but as can be seen in the table, only the pedagogy of three teachers was observed in the year in which the judgment task was administered (2001). It is argued however, that since achievement levels in each school class remain relatively constant over the four years of the study (see Figure 7 and Table 18 in Chapter 6), since attempts were made to control for other features that may have affected achievement (such as social class, race, and gender), and since success is not patterned on the basis of the social class of learners, the enduring feature associated with achievement is pedagogy. If pedagogy is consistent across years, use of differing learners is of less consequence than would have been the case if average achievement levels had varied more than they do.

Table 4: School classes surveyed, observed, and requested to carry out tasks over the four years of the research

The classes of 14 teachers selected from a total of 48 moderated by a single moderator	1999	2000	2001	2002
Classes of teacher N (3A)		S O	S T	S
Classes of teacher M	S	S	S T	
Classes of teacher L	S	S	S T	
Classes of teacher K	S	S		
Classes of teacher J	S			
Classes of teacher I (1B)	S	S	S O T	S
Classes of teacher H	S	S	S T	S
Classes of teacher G (2A)	S	S	S O T	S
Classes of teacher F	S			
Classes of teacher E (1A)	S	S	S T	S O
Classes of teacher D (3B)	S	S	S T	S O
Classes of teacher C (2B)	S	S	S O T	S
Classes of teacher B	S			
Classes of teacher A	S			

LEGEND

S = School classes of learners surveyed and interviewed for social class data, and for which moderated percentage grades were obtained

O= School classes in which all or almost all lessons in a single project were observed and for which audio-recordings and fieldnotes were made

T= School classes to which a task was administered to assess learners' aesthetic judgments

3A,3B,2A,2B;1A,1B=Classes making up the sample for detailed study

Table 5: Summary of the main components of the design, as conducted over time

1999	2000	2001	2002
SURVEY (social class, race, gender, and percentage grades of first cohort of final-year learners)	SURVEY (social class, race, gender, and percentage grades of second cohort of final-year learners)	SURVEY (social class, race, gender, and percentage grades of third cohort of final-year learners)	SURVEY (social class, race, gender, and percentage grades of fourth cohort of final-year learners)
	CASE STUDY 3A	CASE STUDY 2A CASE STUDY 2B CASE STUDY 1B	CASE STUDY 3B CASE STUDY 1A

Legend:
3A=School class with high average social class; high-achieving
3B=School class with high average social class; low-achieving
2A=School class with medium average social class; high-achieving
2B=School class with medium average social class; low-achieving
1A=School class with low average social class; high-achieving
1B=School class with low average social class; low-achieving

Selection of the samples for the two components of the research, each employing different instruments, methods, and analytical techniques is described in the following sections.

3.6. Selection of the samples

3.6.1. Selection of the survey sample

The sample for the survey was purposively (Babbie 2001; Merriam 1988: 48; Shipman 1988: 56) rather than randomly chosen from the study population that conformed to the necessary requirements. The study population consisted of final-year art classes at schools historically created for learners categorised as 'white' but racially mixed when researched while not generally attended by the poorest of the poor[13]. Possession of two characteristics was required for potential schools for the sample. First, school classes needed to share, as far as possible, for consistency, a single moderator's percentage grades (see Section 1.3 in Chapter one and Section 4.3 in Chapter 4 for descriptions of moderator's roles). Second, to strengthen the likelihood of percentage grades being reflections of observed pedagogies, learners in chosen classes needed to have been taught by the observed teacher for at least three

[13] Prior to the onset of democratic government in South Africa in 1994, learners categorised differently according to race attended different and separately-administered schools. Schools for learners classified 'white' often offered art as a secondary school subject, while very few for 'black' and 'coloured' (mixed-race) learners took that opportunity. After 1994 schools previously for white learners gradually became racially mixed but tended to be better-resourced and commanded higher fees than those earlier created for learners of other racial groups.

years and had in most cases been taught by that individual for five years on completion of their final year.

Since the significance of particular contextual features for achievement in art was not known at the start of the study, selection of school classes was not made with the aim of representivity, but rather to facilitate practical comparison between classes with characteristics thought to be important. Given that the literature shows social class to be the feature most strongly linked to performance, initial selection of school classes to which questionnaires would be administered sought to incorporate as wide a range of schools as possible in terms of social class. Selection was on the basis of school fees, the latter taken as roughly indicative of social class. The first 13 schools selected spanned a range in terms of school fees, from quite low (R600 per year) to quite high (R5800 per year). Because of the relative privilege of schools offering art[14], the range of schools did not include those with really low (R60 per year) or really high fees (R28 000 per year)[15]. Selection was confined to state schools since it was thought that including a mix of state and private schools could potentially have introduced additional unknown variables, and since it is hoped that the study might contribute towards development of policy for state schooling. Selection also sought to include school classes within which learners differed observably with respect to race and in which there was a gender mix, since relations between these features and achievement were to be investigated.

Detail was required at the level of individual learners for comparing achievement levels in different social class, race and gender groups. This detail was gathered via questionnaires administered to individuals (see Section 3.6.2 below), and aggregated for analysis. The first part of the analysis is based on the mean grades of different demographic groups; the second round of analysis, that of relations between learners' social class, pedagogic features and percentage grades, uses the mean grades and average social class levels in school classes.

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14 In apartheid (racially segregated) South Africa prior to democratic government in 1994, schools that offered art were for learners classified as 'white'. Although these schools were racially integrated at the time of the study, they remained relatively privileged.

15 Fees given here are those required by the school in the first year of the study (1999). All fees increased annually but the relation of fees between schools remained similar for the duration of the study in that the ranking of schools in terms of school fees remained relatively constant throughout.

Obtaining, categorising and analysing data on learners' social positions and percentage grades, being part of the process by means of which the sample for detailed study was chosen, are covered in the following section.

3.6.2. Selection of the sample for detailed study

3.6.2.1. Instruments and procedures for obtaining data on learners' social positions and percentage grades

Information on learners' social class, race, gender and achievement was collected in various ways. Data on gender and social class was assembled with the aid of questionnaires compiled on the basis of categories described in work on which the present research aims to build (Domingos 1987; see Appendix 1) and administered to a total of 763 learners over a period of four years. The questionnaire was completed under controlled conditions with the researcher present. Detail regarding parents' occupations and education was afterwards probed and clarified in interviews with all 763 individuals since descriptions given by learners were often too broad for categorisation, a problem mentioned in the literature (see Douglas 1964: 40-42). Interviews were also used to establish lengths of time learners had spent with different carers in the case of divorced or deceased parents. Learners' racial classification, being a sensitive issue, was obtained by asking teachers to go through class lists, postulating how learners' would have been labelled in South Africa prior to 1994 (see Section 2.10 in Chapter 2). Learners' final exhibition grades, collected from moderators, were used as indices of achievement in this part of the analysis, for practical art making.

3.6.2.2. Categorising data on learners' social positions

Categorisation of learners' gender and race was relatively straight-forward: learners' recordings of 'male' or 'female', and teachers' estimations of 'black', 'white', 'coloured', 'Indian' and 'Asian' were used respectively. Characterising social class was complex and based on fine detail regarding learners' parents' or other caretakers' occupations and education. Several questionnaire items namely 4 through 12 were drawn on to categorise learners' social class.

Items 4, 5, and 9, referring to learners' parents or other caretakers, were used to identify main and subsidiary breadwinners with whom learners had lived. A single main breadwinner was selected for each learner for analysis, the former being the caretaker with whom the learner had lived for the greatest amount of time in their three final years of secondary school and who earned the highest salary.

Items 6, 7, 8 and 10, 11, and 12, providing detail on breadwinners' employer/ employee status, education levels and types, occupational skill levels and types, positions in authority hierarchies, and the numbers and types of workers employed by those who were employers, were used to position learners in Wright's typology of class locations.

3.6.2.3. Analysis of learners' grades and their social positions: establishing patterns

Analysis of learners' achievement in relation to their social class, race and gender was carried out using data gathered from the first cohort of 254 learners, and again with four years' data from 763 learners for post-hoc confirmation of patterns initially found. In the first round of analysis social class was defined using indicators from a similar study (Domingos 1987)[16]; in the second they were taken from Wright's scheme (see Chapter 2).

3.6.2.3.a. Learners' grades and their gender, race, and social class: initial patterns

Using simple measures of association to test for achievement patterns in the first group of 254 learners, it emerged that there were no significant differences in the average grades of males and females and surprisingly, between learners with different racial categorisations, barring between those classified as 'white' and 'coloured'. The

[16] To examine average grades in relation to social class in the first round of analysis, Domingos' (1987) four separate indices, mothers' and fathers' occupations and education levels, were used. Four categories were created for each parent's occupation and education levels. These were: occupations requiring minimal training and no managerial responsibility (level one); work requiring training and/ or some managerial responsibility (level two); skilled work and/ or work requiring training and medium managerial responsibility (level three); and highly specialised work or work requiring heavy managerial responsibility (level four). Categories for parents' education levels were: no formal education or some or all of primary school (level one); some of secondary school (level two); all of secondary school with or without further education other than a university degree (level three); all of secondary school and a university degree (level four). Both occupation and education levels 'one' and 'two' were collapsed into 'level one', and levels 'three' and 'four' into 'level two', or 'high' and 'low' categorisations.

average grade of learners classified as 'white' was higher than that of those said to be 'coloured'.

There was no significant difference between the average grades of learners with mothers with 'high-level' occupations, and those with 'lower-level' occupations. The average grades of learners with fathers with higher occupation and education levels and mothers with higher education levels were however significantly higher than those of learners with parents with lower occupation and education levels.

There was thus some confirmation of expected relations between social class and achievement when analysis was done with the group of 254 learners as a whole. When average grades of individual school classes were considered however, they were found to vary independently of privilege. While this observed pattern was taken to suggest potential influence of pedagogy, it was not known at the start of the study, whether patterns within cohorts of learners would manifest longitudinally between cohorts. This question necessitated collection of learners' social characteristics and grades across cohorts. Data was collected for four cohorts, over four consecutive years, with the expectation that the achievement of individual classes would be consistent over time.

Attempts were made to stratify surveyed school classes, including at least one high and one lower-achieving class, with as wide achievement-gaps as possible, at each of the different social class levels identified. This design allowed the number of initial schools to dwindle as teachers left posts, on condition that potential sample requirements of varied social strata and performance were met amongst the remaining schools, and also permitted the adding of an additional school when the achievement contrast was not met within the residual schools. Data were assembled for ten school classes in the second year of the study, nine in the third, and seven in the fourth, all classes eventually featuring in the case study having been included in either all four or at least three years of the study (see Table 4 above).

3.6.2.3.b. Learners' grades and their gender, race and social class: post-hoc confirmation of patterns

Post-hoc confirmation of relations between learners' grades and their social characterisations regarding race, gender and social class has been attempted, using all 763 learners in school classes surveyed over the four years. Given that schools were not randomly selected, effect-size tests (Cohen 1988: 567)[17] have been used to compare the mean grades of different groups, differences being described as 'small', 'medium' and 'large', with the latter and only the latter signalling 'practical' or 'clinical' significant difference. Patterns found in the initial round of data are confirmed and since the case study sample was selected on the basis of these patterns, they are recounted in detail (for d-values, see Appendix 2).

3.6.2.3.b.(i) Learners' mean grades and gender

There is only a small difference between the mean grades of male and female learners, rendering gender of minor importance in attempting to control for social factors potentially affecting achievement.

3.6.2.3.b.(ii) Learners' mean grades and racial categorisations

Early race-based achievement trends are confirmed and expanded: learners' racial groups are associated with variation in mean grades to some degree. No practically significant differences between the mean grades of learners categorised as 'white', 'coloured', 'black', 'Indian' or 'Asian' emerges, but there are some differences.

Medium differences emerge between mean grades of learners categorised as white and those characterised as coloured on the one hand, or Indian on the other. There are small differences between grades of learners categorised as white on the one hand, and those of learners characterised as black or Asian on the other, in all cases the grade of white learners being the higher of those compared.

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[17] Cohen's (1988) 'effect size' test can be used to compare averages of two groups not randomly selected. Variation found is said to be 'practically significant' rather than 'statistically significant'. The formula applied to two groups with averages x (1) and x(2) and standard deviations SD (1) and SD (2) is:

$$d = \frac{x(1) - x(2)}{\text{largest standard deviation}}.$$

Scaled differences (d) of 0,2; 0,5; and 0,8 are interpreted as small, medium and large effects respectively, with large and only large differences indicating 'practically' or 'clinically' significant differences.

The group is dominated by learners characterised as white or coloured, and since there is a medium difference between the mean grades of these two groups, attempts have been made to control for their presence.

3.6.2.3.b.(iii) Learners' mean grades and social class

When using Wright's (1997) typology of locations in class relations (see Chapter 2, Table 1) to analyse variation in learners' mean grades in relation to their social class, achievement patterns are complex.

When comparing mean grades of learners using all 12 categories in Wright's scheme, practically significant differences emerge between those associated with degreed breadwinners in all positions in the authority hierarchy (7, 8, 9) and those linked to breadwinners with some of secondary school in all positions in the authority hierarchy (1, 2, 3, 4). Mean grades of the former are significantly higher than those of the latter.

Grouping Wright's categories yielded some patterns:

1. Having parents or breadwinners categorised as 'employers' as opposed to 'employees' does not appear to affect learners' mean grades, confirming the Bourdieuian position. When comparing the mean grade of all learners with 'employee' breadwinners (categories 1 through 9) as a single group, and the mean grade of all learners linked to 'employer' breadwinners (categories 10, 11 and 12) as a single group, there is no difference.

2. Employee parents' positions in authority hierarchies does not appear to affect learners' mean grades. When comparing the mean grade associated with low status in authority hierarchies (categories 1, 4 and 7) as a single group and those linked to moderate (categories 2, 5, 8) and high (3, 6, 9) positions of authority respectively, there are no differences.

3. Employee parents' skill levels are related to learners' mean grades. When comparing the mean grade associated with categories in the low (1, 2, 3) employee skill range as a single group and those associated with moderate (4, 5,

6) and high (7, 8, 9) skill levels as single groups respectively, there are significant differences. The mean grade associated with high employee skill levels is practically significantly higher than that linked to low skill levels. There is a medium difference between the mean grade associated with moderate and high skill levels with the high skill groups obtaining higher mean grades.

Given the association of high breadwinner skills with high mean learner grades in the above and earlier comparisons, the relation between specific breadwinner education levels and learners' mean grades has been investigated in detail using all 763 main breadwinners.

A practically significant difference under Cohen's (1988) criteria is found between the mean grade of learners with degreed (category G) breadwinners and of learners with breadwinners with some of secondary school (category C). Medium differences are found between the mean grades associated with degreed (category G) breadwinners and breadwinners with some of secondary school plus vocational training (category D) or all of secondary school (category E) education, with the first being higher than the latter two. Interestingly, there are only small differences between mean grades associated with degreed (category G) breadwinners and those linked to breadwinners with all of secondary school plus vocational training (category F) or some/all of primary school (categories A and B) education. It is not known why this similarity should occur. It is thought that in some instances the work of learners categorised as 'white' and 'black' may have been judged with different styles in mind.

In summary, there is clearly a positive relationship between breadwinners' education levels and learners' mean grades although the only *practically statistically* significant difference has been found between groups several steps apart on the education scale, those associated with university degrees on the one hand and those with some of secondary school on the other. Statistical evidence could be said to support the perception that the higher the social class, the higher learners' mean grades, the particular aspect of class of importance in this instance being *education levels* of breadwinners. This evidence means that when attempting to control for contextual features associated with achievement, the education levels of main breadwinners have

to be taken into account: these levels featured strongly in the selection of the sample for the multiple case study.

Note could be made here, of the usefulness of Wright's (1997) typology for delineation of contextual features potentially affecting learners' achievement. It could be argued that it is an unnecessarily complex model of social class to use, especially since it has not been utilised in studies on which the present research hopes to build and in which the significance of parental education for learners' achievement has been shown. I claim however, that the specific nature of contextual features associated with learner performance in art was not known at the start of the current study, and that the usefulness of Wright's model lies in its *providing of evidence* of the importance of breadwinners' education for this performance, and of the lesser significance of carers' status in terms of ownership and authority.

3.7. Design of the multiple case study

The sample for the detailed study was purposively drawn (Babbie 2001; Merriam 1988: 48; Shipman 1988: 56) from within the set of surveyed schools. The case-study sample had to be sufficiently small to allow for exploration of detail, and sufficiently large, including as many cases as possible, to permit comparison between contrasting features and some generalisation (see for example Miles and Huberman 1994: 261,172; Anderson 1993: 163-164; Merriam 1988: 56). It was necessary to control for factors other than pedagogy potentially affecting achievement, and have sufficient detail to ascertain which pedagogic features were associated with high performance levels.

It was decided that the minimum number of teachers whose classes could be used for reasonable claims of association of pedagogy and achievement was six: claims based on fewer could be coincidental and including more than six teachers was not feasible for a study of this kind. Including the classes of six teachers made it possible to choose school classes from different social class levels. Teachers could be paired so that the classes of each had socially similar learners, and the classes of one teacher achieved at higher levels than classes of the other – the expectation being that pedagogy between the two would differ. This design facilitates comparison of

pedagogy between socially different high-achieving classes, and between socially similar classes achieving at different levels.

Classes of three pairs of school teachers were chosen from the group of schools surveyed. Teachers were paired so that the social class and to a lesser extent race categorisations of learners in their classes were similar, classes in the three pairs having 'high' (3), 'middling' (2) and 'low' (1) social class respectively, with social class being based on breadwinner education levels and especially possession of university degrees. School classes were first selected on the basis of the social class of learners within them. Once this selection had been carried out, efforts were made to ensure that classes within pairs had similar proportions of learners categorized as 'white' or 'coloured'[18]. Care was also taken to ensure that classes of one teacher in each pair achieved at higher levels (A) than classes of the other (B), over the four years of the study (see Table 6 below). Classes of the six teachers, 1A, 1B, 2A, 2B, 3A, and 3B are described in the following section.

Table 6: School classes making up the multiple case study

	HIGH ACHIEVING	LOW ACHIEVING
High social class	3A	3B
Medium social class	2A	2B
Low social class	1A	1B

Legend:
3A=School class with high average social class; high-achieving
3B=School class with high average social class; low-achieving
2A=School class with medium average social class; high-achieving
2B=School class with medium average social class; low-achieving
1A=School class with low average social class; high-achieving
1B=School class with low average social class; low-achieving

3.7.1. Classes of the six teachers selected for detailed study

Pairing teachers involved consideration of associated breadwinner education levels and race-categorisations of learners. Teachers were paired chiefly on the basis of percentages of associated breadwinners with very low (AB), low to moderate (CD), moderate to high (EF) or very high (GH) education levels over the four years of the study (see Table 7). Average breadwinner education levels in the classes and percentages of learners with particular racial categorisations were also taken into

[18] In the geographical region in which the research was conducted, learners were mostly characterized as 'coloured' or 'white': very few learners were categorised as 'black'.

account (see Table 8). It was not possible to control the spread of breadwinner education levels and learners' race in the school classes, with the result that the degree to which paired classes were socially similar varied over the four years of the research. Global comparison suggests however that paired classes are sufficiently similar to justify pairing.

Classes of teachers 1A and 1B usually had the lowest average breadwinner education levels and number of degrees in the sample (see Table 7). Classes of both teachers included some parents with some or all of primary school as their highest education level, and had large proportions of learners classified 'coloured'. In the second year of the study (2000) the spread of breadwinner education levels was similar for both teachers (see Table 7); in the first and third years (1999; 2001) learners of 1A were more privileged in terms of breadwinner education and learners' race labels than those of 1B (see Tables 7 and 8); in the final year (2002), learners of 1B were advantaged with respect to spread of breadwinner education (see Table 7). Despite these demographic fluctuations all classes of teacher 1A achieved at significantly higher levels than those of teacher 1B (see Figure 7 in Chapter 6).

Classes of teachers 2A and 2B were paired because of associated breadwinners' 'middling' average education levels (see Table 8). Both sets of classes also had small numbers of breadwinners with degrees, and very low numbers with some or all of primary school as their highest education level (see Table 7). Large proportions of learners in all of these classes were classified 'coloured' (see Table 8). In the second and fourth years of the study (2000; 2002) classes of the two teachers were similar in terms of average breadwinner education levels (see Table 8), and in the fourth year the spread of education levels was similar (see Table 7). Classes of teacher 2B included more learners from privileged racial groups than those of 2A in three of four years (see Table 8). Again, despite variance in demography, learners of teacher 2A achieved at significantly higher levels than those of teacher 2B in the first three years of the research; in the fourth year their mean grade was still the higher of the two but not practically significantly so (see Figure 7 in Chapter 6).

Classes of teacher 3A were added to the study from its second year as there were insufficient classes of privileged learners in the initial sample. The classes of teacher

3A were paired with those of teacher 3B as both had the highest although fluctuating breadwinner education levels in the sample, and high proportions of learners classified as 'white' (see Tables 7 and 8). Classes of teacher 3A were more privileged in terms of breadwinner education levels in two years studied (2001 and 2002), and less so in the remaining year (see Table 7). They were also less privileged in terms of amounts of learners classified as belonging to privileged racial groups (see Table 8). Again, in spite of differential privileging, the mean grades of classes of teacher 3A were significantly higher than those of teacher 3B in all three years in which data were collected (see Figure 7 in Chapter 6).

Table 7: Percentages of main breadwinners with specific education levels in the school classes selected for the case study, over four years

Year	Teacher	% main breadwinner with ed.level AB (1)	% main breadwinner with ed.level CD (2)	% main breadwinner with ed.level EF (3)	% main breadwinner with ed.level G (4)	Total number of learners in the class	Annual school fees
1999	1A	-	5 (28%)	12 (67%)	-	18	R1200
	1B	3 (20%)	8 (53%)	4 (27%)	-	15	R1100
	2A	-	5 (28%)	10 (56%)	3 (17%)	18	R2000
	2B	-	12 (48%)	11 (44%)	-	25	R2500
	(3A)						
	3B	-	-	11 (52%)	9 (43%)	21	R3500
2000	1A	3 (14%)	9 (43%)	9 (43%)	-	21	R1500
	1B	4 (18%)	9 (41%)	8 (36%)	-	22	R1100
	2A	-	3 (21%)	9 (64%)	-	14	R2500
	2B	-	7 (28%)	15 (60%)	-	25	R2970
	3A	-	4 (31%)	7 (54%)	2 (15%)	13	R540extra
	3B	-	-	15 (58%)	8 (31%)	26	R3850
2001	1A	2 (13%)	8 (53%)	5 (33%)	-	15	R1650
	1B	-	7 (64%)	3 (27%)	-	11	R1500
	2A	2 (13%)	2 (13%)	10 (63%)	2 (13%)	16	R3500
	2B	-	12 (57%)	7 (33%)	-	21	R3340
	3A	-	-	6 (43%)	7 (50%)	14	R640extra
	3B	-	-	17 (65%)	8 (31%)	26	R4450
2002	1A	-	10 (40%)	12 (48%)	-	25	R1850
	1B	-	8 (31%)	16 (62%)	-	26	R1600
	2A	-	8 (31%)	12 (48%)	5 (19%)	26	R4000
	2B	-	7 (28%)	15 (60%)	-	25	R3700
	3A	-	3 (19%)	6 (38%)	7 (48%)	16	R700extra
	3B	-	4 (19%)	13 (62%)	4 (19%)	21	R5350

Legend:
- =percentages of 12% and lower
3A=School class with high social class; high-achieving
3B=School class with high social class; low-achieving
2A=School class with medium social class; high-achieving
2B=School class with medium social class; low-achieving
1A=School class with low social class; high-achieving
1B=School class with low social class; low-achieving
(3A)=School class not yet in study
R (extra)=art fee over and above ordinary school fees

Table 8: Average main breadwinner education level and learner race group per class selected for case study, over four years (percentages of 10% and lower have been omitted)

Year	Teacher	Ave. main breadwinner ed. level	% learners classified black	% learners classified coloured	% learners classified white
1999	1A	2.6	-	56	39
	1B	2	33	60	-
	2A	2.9	39	56	-
	2B	2.6	-	40	60
	(3A)				
	3B	3.4	-	-	95
2000	1A	2.3	14	76	-
	1B	2.3	-	91	-
	2A	2.7	29	64	-
	2B	2.7	-	52	48
	3A	2.9	-	54	38
	3B	3.2	-	-	96
2001	1A	2.2	13	71	13
	1B	2.2	18	82	-
	2A	2.8	12	88	-
	2B	2.5	-	95	-
	3A	3.4	-	21	71
	3B	3.3	-	-	92
2002	1A	2.7	-	76	20
	1B	2.5	35	62	-
	2A	2.8	23	77	-
	2B	2.7	-	72	24
	3A	3.3	13	31	56
	3B	3	-	14	86

Legend:
- =percentages of 10% and lower
(3A)=School class not yet in study
3A=School class with high social class; high-achieving
3B=School class with high social class; low-achieving
2A=School class with medium social class; high-achieving
2B=School class with medium social class; low-achieving
1A=School class with low social class; high-achieving
1B=School class with low social class; low-achieving

3.8. Contexts of the six cases

The social class and racial characterisations and achievement levels of learners in the six school classes in the case study have been outlined above (see Section 3.7). Sketches of the institutional contexts of each were obtained in interviews with principals who were asked to describe the ethos, learner body, social order, and status of art at schools they headed. All quotations are indicated with inverted commas.

3.8.1. Context of school class 1A

The school of class 1A provided subject specializations focusing on the commercial rather than the academic, with the aim of producing "all-rounded people who can

work in commerce" without tertiary education. It drew learners from the middle to lower social classes, with 20% of the learner body achieving university exemptions and the remainder seeking work in the commercial world after school, going into banking or working as "receptionists, tellers, clerks or legal secretaries". The principal described most learners as "practically oriented" people that would struggle in the average school.

The school was run on a college basis on which mutual teacher-learner respect was encouraged in an attempt to mirror relations in the business world. "Militaristic" actions like "kicking a child out of the classroom" were avoided; learners were encouraged to talk to teachers if they had problems, and the school did "a lot of care work".

Art produced at the school was seen as being original and of high quality, and the subject as equivalent in status to any other. According to the principal, learners saw art as being easy by virtue of its being a "non-exam" subject associated with high grades, and higher in status than subjects such as "mercantile law" because the quality was high. He saw art as a useful subject for learners "weak" in terms of "learning", and acknowledged that art was not studied in depth at the school (there was no art history). The art specialization offered at the school was "Graphic Art", including drawing and the making of linocuts and polypropylene drypoints. All learners used all of these techniques. The teacher had a four-year Fine Art diploma from a technicon (similar to a polytechnic) highly respected in the art world.

3.8.2. Context of school class 1B

The school of class 1B focused on "education" rather than "playing around": learners were expected to be focused on work. The school offered a narrow range of academic subjects such as biology, geography, science, accounting and mathematics but not history or additional languages. It tended to draw learners from the middle to lower social classes. According to the principal they were a "very mixed bunch", socio-economically and in terms of religion and culture, and mostly from outside the immediate community. Most people in the immediate community sent their children to other nearby schools including that of teacher 1A. The principal maintained that many parents although struggling to afford the fees, sent their children to the school as

they felt education to be important and perceived, as did the general public, that the school had good matriculation pass rates.

The principal saw two thirds of learners as "not necessarily good but co-operative", and the remainder as "riff-raff", introducing drugs, theft, gangsterism, and intimidation to the school, striking and persuading others to strike. Many of the "riff-raff" had parents barely able to speak English. The school had a code of conduct with respect to behaviour, work, appearance and attitude, enforceable through various punishments.

The principal thought that art was seen positively by learners in the school, as creative and being less work than subjects such as mathematics and science, because of its practical aspect. She thought teachers saw art as being practical and hands-on, good for learners who had high aspirations but low grades in other subjects. Learners tended to achieve at higher levels in art than in other subjects, and those dropping out before finishing secondary school tended to be those doing mathematics and science rather than art. A small number took history of art or art on the higher grade; the majority just took the specialisations of painting and drawing on offer. The teacher had a three-year Bachelor of Arts university degree including two years of practical art making and three of art history.

3.8.3. Context of school class 2A

The mission at the school of class 2A, according to the principal, was to develop learners' talents and provide them with skills that would enable them to make contributions "whether financial or spiritual" to the community at large, and to find both success and fulfilment. A culture of learning was important, but so was "all-round development: sport, cultural, body, mind, spirit". When learners came with attitudes that weren't going to move them forward, the school wrestled with these demeanours: it aimed to cultivate qualities that were in the best interests of all. If a learner was on drugs, they aimed to rehabilitate him/her. The school aimed for gender equity and racial and religious tolerance – but it was "sometimes difficult to get people to implement these ideals". Underpinning social order at the school was the idea that learners had rights and responsibilities. If there were problems teachers talked to learners, using other counselling structures if this strategy did not work.

The principal claimed that learners at the school had mixed abilities, from those failing to those achieving 'A' aggregates. A number of learners were disadvantaged or did not "have a work ethic". Some struggled with the English language. The school attempted to select learners with adequate mastery of the English language, encouraging learners without this proficiency to "attend a mother-tongue school first, spend money on extra English lessons, and re-apply later on". It was observed that many learners travelled to the school from other areas; the school was perceived by parents to achieve well academically.

The principal saw art as being a valuable subject, with potential to "unlock the inside" of learners. It was not a "dumping ground": if learners did "nothing in mathematics", they would probably "do nothing in art classes either". He saw art as a means to create a "good work ethic, discipline, and attitude", but felt that learners saw it as a soft option, easier than subjects like mathematics. A small number of learners took history as well as practical work; most just took the practical specialisation of painting on offer, and drawing. The teacher had a four-year Fine Art honours university degree.

3.8.4. Context of school class 2B

The school of class 2B taught had, according to the principal, a Christian ethos; learners were treated with respect but the overstepping of boundaries was immediately followed up. It was a "nurturing school" with a family atmosphere, small staff and learners personally known. It encouraged a work ethic, something with which learners often did not arrive at school. It encouraged learners to be involved in sport and clubs and on stage, on the premise that self-confidence so engendered influenced academic work positively. There was a negotiated code of conduct in which learners had rights and responsibilities. According to the principal the school worked hard at maintaining discipline, punishing misdemeanours but providing counselling in an attempt to prevent problems such as absenteeism.

The school tended to draw learners from the middle to lower social classes. It was multiracial, drawing few learners from its immediate previously "white" area and most bussing in from surrounding "coloured" areas. According to the principal, the school had excellent matriculation pass rates and most parents were prepared to pay

the fees and have their children travel. The school was able to select learners who achieved in primary school and parents who would support their children and the school.

Art was perceived as being less structured than other subjects at the school, but demanding. Learners were introduced to different media, had to create portfolios, and took art history. It was a serious subject, including theory and practical work. The principal claimed that parents did not see art as enjoying the status of subjects such as mathematics, but it was popular with learners and many were interested in pursuing careers in graphic design after school. All learners did the painting specialization offered at the school, and drawing. The teacher had a four-year Fine Art honours university degree.

3.8.5. Context of school class 3A

The school of class 3A was an art centre committed to providing "innovative" art and design education to learners, adults and educators. It nurtured self-discovery, self-esteem and the fulfilling of individual potential as well as art and design skills. It embraced cultural diversity, and was proud of its community involvement and policy of working with learners with varying ability levels. It attracted and hoped to continue to attract learners from a wide variety of social contexts. This diversity was reflected in the three cohorts of learners in the study. They attended art classes in the afternoons, doing the remainder of their school subjects at schools at which fees ranged from R2000 to R10 000 and occasionally more, per year.

According to the principal, the centre strove to maintain a beautiful environment in which beautiful objects including exhibitions by learners, past learners, and local artists, were continually displayed. Learners read and signed ethics contracts on acceptance. They were expected to attend all classes, arrive promptly in appropriate clothing with appropriate materials, and respect all activities and property at the centre at all times. As soon as unacceptable behaviour (such as graffiti on art centre property or learners not working conscientiously) was manifested, learners were reminded of their contracts and this strategy had always resulted in learners falling in line.

The principal described art at the centre as having "the highest possible status". Several art specialisations were offered of which only drawing was included in this research study. All learners in observed classes exhibited drawings in a wide variety of media. The teacher had a four-year Fine Art diploma from a technicon highly respected in the art world.

3.8.6. Context of school class 3B

The school of class 3B was a senior secondary school with an ethos of treating every leaner as an adult: emphasis was laid on responsibility and taking consequences for actions. There were regular life skills, bible, and culture lessons emphasizing this ethos, and responsibility and self-discipline were encouraged in all lessons.

According to the principal, most learners at the school came from middle class homes, and the school hoped to continue to attract the type of learners it had always attracted: those with ambition who were prepared to work hard.

The principal claimed that art was seen as a "very high profile subject": learners had produced high results for ten to fifteen years, and some of their works were framed and displayed around the school. Art had the status of any other subject including mathematics and business economics, but there was a general awareness that art required more work than mathematics and economics with its portfolio-creation, and practical and theory requirements. Doing art on the higher grade was seen as being very intensive and over half of the class took the subject on the higher grade level each year. Successful learners tended to be those who managed their time well, time management being one of the skills encouraged by the school. Three art specializations were offered at the school, the two included in the study being 'painting' and 'graphic art'. The teacher had two university degrees, both of which were taken at honours level, one in Fine Art and the other in History of Art.

3.8.7. A note on case 3A

There are grounds for exclusion of case 3A in that it differs from the other cases, all of which were ordinary state school classes while classes of 3A were at an art centre. It might be thought that achievement levels of learners attending the art centre would automatically be higher than those of learners at conventional schools, by virtue of

inevitable exposure at the art centre, to a variety of art-forms and activities, and culture of interest and commitment generally associated with such centres. I argue for the inclusion of 3A however, on the basis of its similarity to 3B, the case paired with it for comparative analysis (see Chapter 6). In both cases resources appeared similar in terms of materials and displays. Learners in both contexts were taken to art exhibitions from time to time, and were expected to be committed to their art-making and spend time outside of normal school hours working on it at school. Learners were privileged in both cases – in some years those of 3A were more so, and in other years, those of 3B more so (see Table 7).

3.9. Gathering data for the six cases

Detailed data was needed to characterise pedagogy and learners' achievement in the six school classes making up the multiple case study, for analysis of relations between social class, pedagogy, and learners' achievement. Gathering data on learners' achievement was an involved process and forms the subject of Chapter 4. Methods and processes by means of which data were collected for the characterisation of pedagogy are detailed below. Actual categorisation of aspects of pedagogy is carried out in Chapter 5.

3.9.1. Data required for the characterisation of pedagogy

Data-gathering on pedagogy could potentially range from the broad to the specific, from a focus on "everything", through that which "stood out", to particular key problems or features (Wolcott 1981: 254-6). In the current study it was shaped by two requirements.

First, positioning the study in the mode of earlier work on associations between specific pedagogic features and socially particular learners' achievements (see for example Domingos 1987; Daniels 1988; Morais et al 1992 and 1995; Morais and Antunes 1994; Morais and Miranda 1996; Morais and Camara 1997; Morais and Rocha 1997; Morais and Pires 2002), meant use of accompanying theoretical frameworks (Bernstein 1971; 1975a; 1975b; 1981; 1990; 1996; 1999; 2000b) and commensurate empirical descriptions. Qualitative data were thus needed to describe pedagogy in terms of classification of "discourses", "space" and "agents", framing of

hierarchical rules and the selection, sequencing, pacing and evaluation criteria of instructional discourse.

A second aspect shaping data gathering was the focus of the study on art. While earlier relevant studies focus on children's discrimination between discourses (Daniels 1988), achievements in science (Domingos 1987; Morais et al 1992 and 1995; Morais and Miranda 1996; Morais and Camara 1997; Morais and Pires 2002), and regulative competences (Morais and Antunes 1994; Morais and Rocha 1997), the present research appears to be the first in the body of work in which it seeks to be positioned, to focus on pedagogy in relation to levels of achievement by socially particular learners, in *art* at senior secondary school. Attempts were thus made to capture the richness of social activity in art classes as fully as was possible, an approach in line with Krathwohl's (1998: 266) point that what is important cannot be known before the specific focus of a study becomes clear.

The need to capture data for description of pedagogy in terms of classification and framing, as well as for comprehensive delineation of activities in art rooms, required use of a number of methods, "direct" or "indirect" (Mouton 1996: 144). Direct methods included classroom observations, and the making of fieldnotes and audio-recordings; indirect methods comprised teacher interviews, items on learner questionnaires, and scrutiny of project handouts and lesson plans. Employment of these methods is described with reference to different objects namely, capturing classification data, collecting framing data, and gathering additional data pertaining to pedagogy in art classrooms potentially unclassifiable in terms of the concepts of classification and framing.

3.9.2. Methods used for gathering data to characterise pedagogy

3.9.2.1. Observation and the taking of fieldnotes

Observation and fieldnotes are useful for describing processes in settings, in ways that do justice to the complexities of social structures and interactions (Brewer and Hunter 1989: 44-46), especially where the noting of non-verbal behaviour is required (Krathwohl 1998: 266-7). Observation can be performed with varying degrees of dissociation, from complete immersion to complete detachment from the observed (Robson, cited in Brown and Dowling 1998: 45). Gold (cited in Babbie 1983: 247-

248) distinguishes four observer modes namely, the unobtrusive researcher; the researcher interacting with research subjects but not participating in activities; the researcher participating in activities but as a researcher, and the researcher as a non-differentiated participant.

Since I wanted data on pedagogy *normally experienced* in observed classrooms, I observed in Gold's first and second modes, trying to be as unobtrusive as possible with my dress and behaviour but at times interacting with research subjects without participating in activities. Given the relative freedom of movement and social interaction in art classes, I was often able to position myself facing away from and with my back towards activities I was noting in writing. When approached by teachers or learners for art-related opinions I demurred, explaining that I was not supposed to intervene. There were many instances of success, evidenced when I took leave of the classroom at the end of lessons and teachers realised with surprise they had forgotten my presence, and when learners spoke about me not realising that I was listening.

I observed an entire single project with each of the six teachers in the sample selected for detailed study. Observed projects comprised one of around twelve forming the basis of learners' final exhibitions and carried out in the final two years of secondary school. Observation entailed attendance of between 10 and 30 lessons per school. Observing at such length was necessary because projects included a variety of components in different combinations or sequences not predictable before-hand. Teachers spontaneously added demonstrations and other elements according to what they deemed to be learners' needs, and it was not possible to pre-determine which would be typical lessons. Another reason for lengthy observation was the difficulty involved in selecting a standard amount of lesson time across schools, since the duration of classes ranged from 30 to 90 minutes. As a result almost all lessons of projects were observed. The fact that observation was extended in time probably contributed towards my unobtrusiveness, serving to "habituate" (Brown and Dowling 1998: 47) research subjects to my presence.

Fieldnotes were made of observations. Fieldnotes can be highly structured as in observation schedules with narrow observation categories, less structured with broad categories, and unstructured as in ethnographic note-taking (Brown and Dowling

1998: 49-54). In the present study, attempts were made to strike a midpoint like Wolcott's (1994: 14) course between the extremes of "too-selective" and "hopeless obfuscation" of detail. Care was taken to make notes in broad categories relating to the concepts of classification and framing, and to note any additional out-of-the-ordinary occurrences and features.

Observation-based fieldnotes were used to collect data on the following:

- Classroom displays (which fed into description of classification of discourses)
- Stored visual materials (which fed into description of classification of discourses)
- Teachers' use of visual materials (which fed into description of classification of discourses)
- Teachers' and learners' use of space (which fed into description of classification of space)
- Time intervals (which fed into description of classification of space)
- Learners' use of materials (which fed into description of classification of space)
- Ways in which and the degree to which the teacher differentiated between learners (which fed into description of classification of agents)
- Entry to and exit from the classroom (which fed into description of framing of regulative discourse)
- Teachers' and learners' gestures and facial expressions(which fed into description of framing of regulative discourse)
- Initiators of dialogue (which fed into description of framing of regulative discourse)
- The degree to which learners were work-focused (which fed into description of framing of regulative discourse)
- Sound levels (which fed into description of framing of regulative discourse)
- All non-verbal teacher and learner actions carried out during teacher-learner interaction (which fleshed-out audio-recordings and transcriptions of interactions for description of instructional selection, sequencing, pacing and evaluation criteria)

The theoretical categories of 'discourses', 'space' and 'agents', framing of hierarchical rules and the selection, sequencing, pacing and evaluation criteria of instructional discourse were borne in mind, and notes made on anything relating directly or indirectly to each. For later analysis of discourse, counts and descriptions of books, posters, slides, clippings and other visual imagery displayed or stored in classrooms or school libraries, and teachers' references to imagery from the history of art were made. With analysis of space in mind, diagrams and descriptions of teachers' and learners' use of space and art materials were sketched, and time intervals noted. For later characterisation of agents, details such as learners' apparent ability levels and differentiation of learners by teachers were noted.

For anticipated analysis of control, attempts were made to capture as much as possible of the verbal and non-verbal communication between teachers and learners. This record included as much speech as possible, looks and gestures, actions, and some description of participants. While all art teachers addressed the whole class some of the time, most lesson time was spent with the teacher moving around the room, engaging with single or small groups of learners around the making of individual artworks. To record ensuing speech necessitated following the teacher around the room, regardless of ambient sound levels. Attempts were made to do this following ways already described, as unobtrusively as possible.

Notes on communications were made at the time of their occurrence or shortly thereafter. Descriptions were ticked off against a checklist to ensure consistency in observations across schools. Any 'extra' phenomena coming to attention, those not seeming to fit theoretical categories, were noted. Examples of features not fitting existing categories included fluctuating ambient sound levels in observed classrooms; amounts of time between teacher-learner interactions; descriptions of learner activities at any given moment during lessons; the apparent status of art in the respective schools; and the demeanours of teachers.

3.9.2.2. Audio-recording and transcription of verbal interactions

While notes could be made or expanded after leaving observation sites (Krathwohl 1998: 267), they were inadequate for capturing the form and content of speech with

accuracy. Since the eventual intention was to identify and analyse control relations embedded in and carried by language, it was necessary to take down speech as completely as possible. This completeness required audio-recording and transcription. Conventional stationary audio-taping devices were of no use given the high ambient sound levels occasioned by the movement amongst and communication with individuals or small groups within classes of interacting learners, by teachers. Recording in this way produced a cacophony of sound within which single voices were indistinguishable. Recording of just teachers and the individuals with whom they were interacting was accomplished with the use of a tiny device worn by teachers and concealed from learners so as to not attract attention. When audio-recordings were transcribed, corresponding fieldnotes were added in brackets to give a relatively three-dimensional account of observed events.

Transcribed audio-recordings with added descriptions of non-verbal aspects of communication comprised data for analysis of:

- Teacher references to consecrated art (which fed into description of classification of discourses)
- Teacher use of visual material (which fed into description of classification of discourses)
- Differentiation of learners by the teacher (which fed into description of classification of agents)
- Entry to and exit from the classroom (which fed into description of framing of regulative discourse)
- Degree of openness of communication relations (which fed into description of framing of regulative discourse)
- Regulative mode (which fed into description of framing of regulative discourse)
- Initiation of dialogue (which fed into description of framing of regulative discourse)
- Control of work focus (which fed into description of framing of regulative discourse)
- Sound levels (which fed into description of framing of regulative discourse)

- Selection of projects (which fed into description of framing of selection in the instructional discourse)
- Selection of components of projects (which fed into description of framing of selection in the instructional discourse)
- Selection of sources of reference (which fed into description of framing of selection in the instructional discourse)
- Sequencing of components of projects (which fed into description of framing of sequencing in the instructional discourse)
- Control of the amount of work produced (which fed into description of framing of sequencing in the instructional discourse)
- Control of the degree to which learners worked apace (which fed into description of framing of pacing in the instructional discourse)
- Explication of criteria (which fed into description of framing of evaluation in the instructional discourse)
- Complexity of projects (an additional feature)

3.9.2.3. Teacher interviews

Since the loosely specified official requirement (Western Cape Education Department 1995) was constituted by projects devised by individual teachers and records of this activity kept in ad hoc form, recovering of work done called for interviews with teachers. Information on aspects of control that were extended in time, instances of "past eras" (Brewer and Hunter 1989: 44) inaccessible through fieldwork, were obtained through interviews.

Interviews like fieldnotes, can be structured to differing degrees, from standardised formats with pre-coded categories for responses, to unstructured conversations with loose guidelines (Brown and Dowling 1998: 73). Various types of semi-structured interviews are positioned between these extremes.

In the present study two semi-structured interviews were conducted with each of the six teachers in the sample, the first after a year of enquiry, the second towards the end of the research (see Appendix 4). For consistency across interviewees, the same pre-set questions were put to all teachers to obtain data on the following:

- Art-related discourses referred to (which fed into description of classification of discourses)
- Use of space and materials (which fed into description of classification of space)
- Differentiation of learners (which fed into description of classification of agents)
- Teachers' approaches to authority relations (which fed into description of framing of regulative discourse)
- Selection of practical projects (which fed into description of framing of selection in the instructional discourse)
- Sequencing of practical projects (which fed into description of framing of sequencing in the instructional discourse)
- Pacing of practical projects (which fed into description of framing of pacing in the instructional discourse)
- Evaluation of practical projects (which fed into description of framing of evaluation in the instructional discourse)
- Content of practical projects (an additional feature)
- Teacher qualifications (an additional feature)
- Resources available (an additional feature)

Many questions, such as "Can you go over all the projects you carried out?" and "Can you please describe each learner briefly, in any way you like?", although standardised, opened interaction considerably. Teachers' responses were probed until a sense of clarity was achieved.

Efforts were made to assume a non-threatening position and assist the flow of the interview, in an attempt to maximise opportunity for frank discussion and increase the quantity and accuracy of information offered. Teachers were asked to select interview locations and times with which they felt at ease; the idea of the interview was broached once many observations had been carried out and teachers were familiar with the purposes of the research and their roles within it; ordinary rather than technical language was used; anything teachers offered was considered and explored. Interviews were also tailored so that difficult questions were positioned towards their

close and followed with requests for lighter, more anecdotal information, to "cool down" (Brown and Dowling 1998: 73). Teachers' responses were noted by hand.

3.9.2.4. Use of questionnaire items

Questionnaires administered to all 763 learners in the study for information on their social class and gender included questions about art subjects registered for; sought-after qualities in art; intended careers; influences on understanding of art, and in the final year of the study, about art and books in the home, art galleries, and history of art (see Section 3.6.2.1. and Appendix 1). Questions about art and books in the home, art galleries, and history of art were an ad hoc supplement to questionnaires in the final year of the study, added in an attempt to triangulate information given by teachers in interviews. All learners surveyed were also interviewed to triangulate responses given on the questionnaires.

It is a weakness of the study that questions relating to knowledge of history of art were added to the questionnaire for only one cohort of learners, and that learners thus surveyed were not always the same learners experiencing observed pedagogy. It is argued, as in Section 3.5 above however, that since achievement levels in each school class remain relatively constant over the four years of the study (see Figure 7 and Table 18 in Chapter 6), since attempts have been made to control for other features that may have affected achievement (such as social class, race, and gender), and since success is not patterned on the basis of the social class of learners, the enduring feature associated with achievement is pedagogy. If pedagogy is consistent across years, use of differing learners is of less consequence than would have been the case if achievement levels had varied more than they do. Further, information obtained through ad hoc questionnaire items was used only as back-up evidence for some claims made in teacher interviews.

Questionnaire items provided data for:

- Exposure to consecrated galleries (which fed into description of classification of discourses)
- Exposure to history of art (which fed into description of classification of discourses)

3.9.2.5. Documentary evidence

There were few project handouts in existence but where present these flyers were consulted as back-up evidence for claims made in teacher interviews, regarding selection of projects and components of projects, sequencing of different aspects of projects, and evaluation criteria.

3.9.3. Triangulation

Different types of triangulation have been described (see Section 3.1 above). When gathering indirect data on pedagogy through teacher interviews and project handouts, I attempted to triangulate this information by drawing on learner responses to the relevant learner-questionnaire items and given by learners in interviews conducted to follow up questionnaire responses (see Sections 3.9.2.4. and 3.9.2.5. above). Information about visits to art galleries and other art events, and exposure to history of art was obtained in this way. I also attempted to triangulate teacher-given information regarding resources, with observation and notes on materials available in classrooms and school libraries.

3.9.4. Ethical considerations

Collecting data on pedagogy and learners' social positions required establishing mutual trust between myself and research subjects. Considerable effort was made to create and maintain this trust in two related ways, the first being through informed consent and the second, guaranteed anonymity.

Teachers were invited to participate in the research. There was a "hierarchy of consent" (Miles and Huberman 1994: 291) in that learners were obliged to participate once their teachers had agreed to do so, but only insofar as they were observed. The purposes of the research were explained and anonymity of subjects emphasised. To avoid the situation where learners felt forced, through being in classrooms, to participate (O'Connell 1994: 57), their consent was sought for the completion of questionnaires, and a small number of refusals accepted (761 of 763 learners responded willingly to my requests).

Arguments have been made on the one hand, for disclosing the identities of the researched in case studies, in that this disclosure would enable readers' use of existing understandings in the reading of presented information (Yin 1994: 143). On the other hand it is difficult to assess potential harm to participants (Merriam 1988: 179), and in a sense harm will always occur to participants in a qualitative study (see McCall and Simmons in Miles and Huberman 1994: 292). As Miles and Huberman (1994: 292) rightly claim, both access and data suffer when exposure is feared.

Anonymity has been distinguished from privacy and confidentiality (Miles and Huberman 1994: 293, drawing on Sieber). While privacy concerns control over protected information, anonymity requires excision and exclusion of any information linking particular individuals or institutions to particular data (ibid.).

In the current study the sensitivity of data on learners' social positions, the level of detail on pedagogic practice, and the relational design of the research, all served to render anonymity of all research subjects and institutions desirable. So I took care to ensure the anonymity of both respondents and institutions, and to make certain that all individuals concerned understood that their privacy and confidentiality would be preserved.

3.10. Chapter summary

In this chapter the use of multiple methods to answer the research question 'What, if any, are the specific pedagogic features associated with achievement in matric art by learners in general, and socially disadvantaged learners in particular?' is described. A quantitative survey has been used to establish the existence of patterns in learner performance in relation to their social class, race and gender, and facilitate selection of the sample for detailed study. A multiple case study of the classes of six teachers has been conducted to facilitate detailed analysis of pedagogy and art achievement for socially specific learners. Attempts have been made throughout the study, to flesh out quantitative data with description gained in semi-structured interviews, and to be systematic and theory-driven in the collection of data through qualitative case-study means. Qualitative data has been carefully quantified in the coding process.

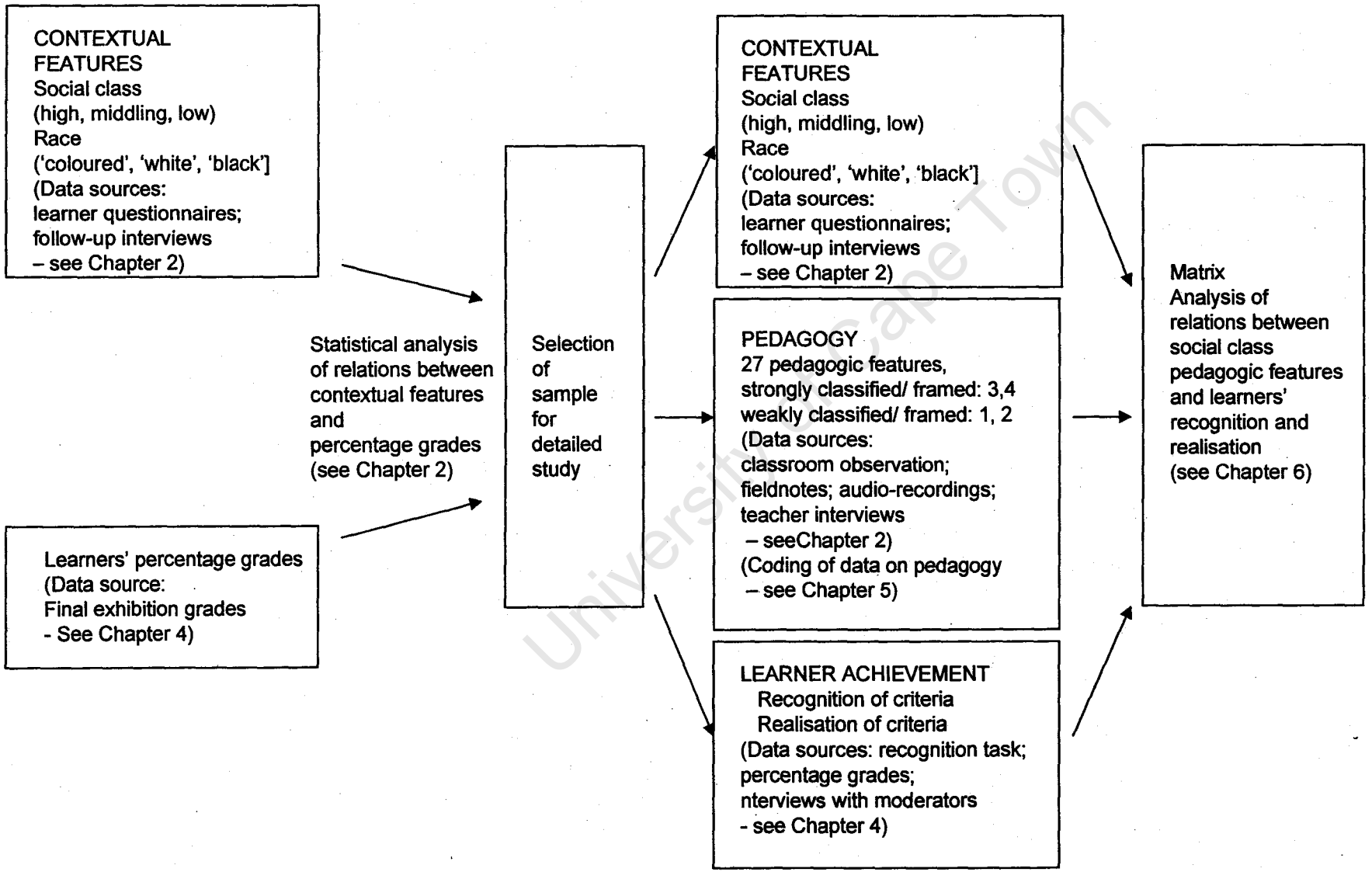
I briefly sketch criticisms of mixing methods and draw on Hammersley's continuum and Popper's argument that quantitative and qualitative methods are both used to further the ends of hypothetical deduction, prediction, explanation, and testing to support my use of both approaches.

I discuss weaknesses of the case study approach and my attempts to address these. Conducting a multiple rather than a single case study was intended to strengthen the generalisability of the research. Enhancement of reliability and validity have been sought through systematic and theory-driven data collection and coding; being explicit about procedures followed, selections made, and theoretical assumptions; and seeking inter-rater reliability for coding.

A design overview is given, showing the cyclical nature of the study. Selection of cases for the multiple case study was on the basis of patterns found in the initial year of the survey and confirmed over the subsequent years of the research. The classes of six teachers, two at each of three, 'high', 'middling' and 'low' social class levels, one of each couple performing at higher levels than the other, comprise the multiple case study. The cases and their contexts are described, as are methods for gathering data to characterise pedagogy in the six cases.

In order to compare performance across the classes of the six teachers, delineation and measurement of sought-after qualities in the researched context was needed. Description of these features and instruments used to measure learners' achievement forms the subject of the following chapter.

Figure 1: Summary of research design



CHAPTER 4

ACHIEVEMENT IN ART

Investigating relations between pedagogy and achievement in art by socially different learners requires definition of the concept of 'achievement in art' and how this construct will be measured. In this chapter achievement is described in terms of Bernstein's (1996; 2000b) concepts of "recognition" and "realisation". The section addresses the need to establish and stabilise criteria for judgement of artworks. It describes methods and instruments by means of which the data was gathered to measure learners' recognition and realisation. It concludes by delineating use of the idea of 'achievement in art' in the study.

4.1. Definition of achievement in art

In Chapter 2 debates around definitions of art were alluded to. It was pointed out that conceptions of art and secondary school art curricula, given loose articulation of criteria, differ. It is therefore important for the current study, to ascertain the degree to which sought-after criteria used in the assessment of final-year exhibitions are context independent.

Positioning the present study in the Bernsteinian tradition (see Morais et al 1992; Morais and Miranda 1996; Morais and Camara 1997; Morais 1998) means measuring achievement in terms of possession of 'recognition and realisation rules' (Bernstein 1996: 31-32). Given the focus of the present research on practical art-making, data is needed to describe firstly, learners' possession of "recognition rules" or the ability to recognise sought-after specialised features in art. Data is also needed to indicate the degree to which learners have acquired privileged "realisation rules" or the ability to make art.

Relatively simple measures of learners' recognition and realisation are required to facilitate comparison between learners in different social class groups on one hand, and in different school classes on the other. Percentage grades awarded for final exhibitions have been used as indicators of realisation; recognition has been tested

using an instrument developed to test judgment of quality in drawings. Measurement of this recognition and realisation necessarily began with the question as to *what* is being recognised and realised.

4.1.1. Recognition and realisation of what?

Measurement of learners' recognition in the science study on which the present research intends to build (see Morais et al 1992: 248) is sought in relation to the fundamental ability to "problem-solve". It focuses on learners' capacity to distinguish test questions requiring recall, from those calling for *use* of science knowledge in the solving of problems. Realisation is measured in terms of learners' abilities to produce the correct texts, to solve problems using specialised knowledge (ibid.). Equivalents in art would perhaps require learners to distinguish between artworks with or without sought-after qualities, and create artworks with those qualities. It is argued that sought-after qualities have to be established rather than assumed.

While sought-after criteria for practical art-making have been conceived in universal terms (see for example Collingwood 1963), the importance of judging artworks in relation to other works similar in style and tradition has often been noted (see Vogel 1986; Gombrich 1979; Rosenberg 1967 and others). Observation and conversations with teachers and subject advisors suggest that the latter stance held sway at the time of the present research.

One implication of the location of sought-after criteria within different traditions is that any task requiring judgement needs to provide some indication of sought-after qualities, and verbal description would potentially bias results in favour of those with linguistic abilities or taking history of art. Further, explication of criteria would serve to sensitise learners to features and mask pedagogic effects which are actually the object of study. Fair selection of artworks for a recognition task would thus locate images in a tradition with which respondents are familiar and rely only minimally on the verbal.

Lack of a notion of universally-accepted criteria also has implications for measurement of realisation. It begs the question as to what percentage grades awarded for learners' artworks represent, and whether what is represented is similar across

schools. While percentage grades can be used to provide a measure of realisation, it is thought that understanding of realisation will be enriched by descriptions of what marks denote.

Another feature posing difficulty for assuming sought-after qualities in art is the general scarcity regarding verbal explication of criteria. This tacit approach has been encountered in both written documents such as syllabi and project handouts, and in spoken form, in interviews with teachers and other assessors, in the present study[19], and also features in the literature (see Davies 1992; Gray and MacGregor 1991; MacGregor 1990).

Further, an attribute affecting measurement of recognition and realisation is the generally-acknowledged subjectivity at play in the judgement of art. Taking cognisance of this subjectivity meant ensuring overlapping judgments between several individuals when creating the recognition instrument; looking for patterns rather than single correct answers when analysing responses to the judgment task; and using monitored, collectively-made assessments of realisations.

In acknowledgement of assumed criteria-tradition links, the paucity of verbally-explicated objectives, and the subjectivity of artistic judgements, measurement of learners' recognition and realisation is founded on attempts to establish the existence or otherwise of shared sought-after criteria for secondary school art in the context studied.

4.1.2. Establishing the existence of shared sought-after criteria

In my attempt to investigate the existence of generic sought-after criteria for practical art-making at secondary school level in South Africa, efforts have been made to elicit criteria from three sources, namely, secondary school teachers, moderators, and those responsible for admission to tertiary-level art courses.

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[19] Criteria were not explicated in the syllabus in use for the duration of the study (see Chapter one, section 1.3), and only sometimes so in the initial responses of teachers and subject advisors to requests for sought-after qualities. Neither procedures nor guidelines for the achievement of principles were provided in the syllabus. Spoken criteria were often phrased in general terms such as "technical competence" or "interesting content".

4.1.2.1. Methods for establishing sought-after criteria

Data was gathered in semi-structured interviews with all teachers and moderators in the study, and seven heads of committees responsible for selection of tertiary institution students.

Teachers and moderators were asked the question "What qualities does the work of a final-year learner need to show, to be assigned an 'A' grade?"; moderators were also asked "What do you look for when you moderate exhibitions?"; and selection committee representatives were asked "What do you look for?" in portfolios submitted for entrance to their institutions. All answers given were probed until a perceived degree of clarity had been achieved. Some variously expressed commonalities emerged and are summarised below.

4.1.2.2. Results of interviews for sought-after criteria

Admission to tertiary-level university-, technical- and art college art courses depends, according to selection-committee members, on "an ability to draw"; "ability to interpret ideas in visual form"; "sensitivity to the use of visual qualities"; and "a sense of imagination, of seeing things differently".

Moderators of secondary school final-art-exhibition grades vary in the degree to which they work intuitively when moderating, some never explicitly identifying criteria of judgement, and others referring to mentally constructed grids of features including school-provision and art-related qualities. Sought-after qualities include "originality", "skill" and "understanding of formal elements".

There is a high degree of similarity in features teachers and moderators associate with achievement of high 'A' grades for practical work. These features can be grouped into six categories, the first of which is "originality", also expressed as "a distinct style", "an individual style", or "strong sense of style". A second feature is "technical ability", expressed generally as such or specifically as for instance "skill with paint", "sensitive use of line" or "good colour sense". Other sought-after qualities are "skill with composition"; "interesting (subject matter) content"; "experimentation" and "impact", or the degree to which art-works are "eye-catching".

4.1.2.3. Uses and limitations of generally sought-after criteria

Responses to interview questions indicate presence of some common sought-after features for art at secondary school and beyond, and also that judgement of artworks involves simultaneous consideration of a number of inter-related features. While the exercise of mapping criteria is useful in its own right and for describing achievements represented by percentage grades, the set of criteria was too vague for use in a recognition task. In order to obtain the clear indications of recognition needed to differentiate between learners, it was necessary to simplify axes of judgement.

4.2. Measuring recognition

As suggested above, eliciting recognition criteria required a task located within a single and familiar tradition, and displaying criteria identified by teachers and other standard-setters as important. Both the set of criteria for which recognition was sought and processes followed in creation of the instrument had to allow for and map differential privileging of consecrated criteria. The following sections describe location of a suitable tradition within which to situate the task, accommodation of subjectivity in selection of drawings for the task, development and administering of an instrument to gauge learners' recognition, stabilising judgements for recognition, and levels of learner recognition.

4.2.1. Situating the recognition task in a tradition

Identifying a tradition with which learners would be familiar required finding art-works of a type familiar to learners across a range of contexts. It was expected that all learners would have awareness of 'life drawing', a technique of careful observation and naturalistic representation of objects on a relatively small scale. Drawing from life is a practice commonly encouraged by teachers with the aim of developing different aspects of 'technical ability'. Drawing is tackled by all learners at some stage in secondary school.

The tradition of life drawing was selected as the basis for the recognition instrument for several reasons. First, it was anticipated that learners would recognise 'drawings from life' and discern between those drawings of higher and lower quality to differing degrees. Second, given the lack of complexity (absence of elements such as

composition, symbolic content, and experimentation) of life drawings, it was expected that assessing quality would require a narrow judgement and focus on 'technical skill'. Lastly, drawings from life, while maintaining their status as genuine artworks, could be used to create a relatively standardised range of images for comparison.

A recognition instrument was constructed in which learners were required to rank two sets of similar pencil drawings, five in each set, according to the concentration of sought-after features within them. Although ranking the drawings would require judgement of a relatively narrow range of mostly technical elements, the elements remained multi-faceted and selection of images for inclusion in the task needed to ensure that drawings included were seen as rank-able by more than a single individual.

4.2.2. Accommodating subjectivity in the selection of drawings for the recognition instrument

Selection of drawings for inclusion in the task, being to a degree subjective, was carried out with the assistance of several individuals. A large number of potential pictures were created. Two teachers not otherwise in the study were asked to administer life-drawing exercises (see Appendix 5) to learners in their senior secondary art classes. Creation of two accurate observation drawings was required of individuals, one each of an apple and a pineapple. These images were to take into consideration tone changes, textures, and other details on the surfaces of the fruit, and to create an impression of three-dimensionality. Sizes of the drawings were specified with the aim of rendering them comparable. Black-and-white photographs were taken of the resulting 60 'pineapple' and 30 'apple' pictures, to increase similarities in their general appearance since the originals varied slightly with respect to size and because sets of images were needed for whole classes to complete the ranking task simultaneously.

Once the set of 90 images was available, a further three art teachers not otherwise in the study were independently asked to grade the photographs using symbols 'A' (denoting 80% and over) through 'F' (30-39%). Images were selected for the instrument by the researcher according to two criteria: first, drawings in each set

spanned a range in terms of quality, and second, the grades given by different graders for each drawing were identical.

4.2.3. Instrument for gathering recognition data

The instrument consisted of two sets of numbered images. One sheet comprised five photographs of drawings of apples, all deemed realistically drawn with attempts at creating illusions of three-dimensionality. The second set was made up of five photographs of drawings of pineapples, judged to reflect similar efforts at realism and capturing the strong sense of pattern or design inherent in the subject. Photographed drawings of apples and of pineapples respectively displayed differing degrees of technical competence.

Thirty identical sets of photographs with attached response-sheets were made (see Appendix 6) in order to facilitate completion of the task simultaneously by whole school classes without interactions between learners.

4.2.4. Stabilising criteria for recognition in the context of the research

4.2.4.1. Method by means of which recognition criteria were stabilised

The instrument, although designed to test learners' recognition, was administered to teachers and moderators with the aim of creating a stable set of judgements against which learners' recognition could be measured. The six teachers in the sample, two teachers from the initial sample[20], and all five moderators in the study were asked to rank images on each sheet from strongest to weakest, by entering the numbers of drawings on additional sheets provided. It was stressed that there was not necessarily a single correct way to rank the drawings, and that the researcher was interested in respondents' opinions of their quality.

In order to facilitate explanation of rankings, respondents were asked to give reasons for their orderings in follow-up interviews. The latter were semi-structured, beginning with "What made you choose this as the strongest drawing?", followed by "In what way is this (the drawing they placed in the second position) weaker than this (the drawing they placed first)?" and "In what way is this (the drawing they placed second) stronger than this (the drawing they placed third)?", until justification for all

[20] Other teachers in the initial sample were no longer teaching in the same contexts.

rankings was obtained. All answers were probed until a perceived degree of clarity was reached, or respondents closed discussion with comments like "I don't know" (see Appendix 7 for examples of reasons for rankings).

4.2.4.2. Patterns in teachers' and moderators' rankings

Consideration of teachers' and moderators' responses to the ranking task revealed the emergence of broad patterns in the ordering of both sets of drawings. In ranking the images of apples, teachers and moderators always placed drawings A3 and A5 in the first two positions, and usually put A1 and A4 in the second pair of places and A2 last. With the pictures of pineapples, two thirds of evaluators placed drawings B1 and B2 in the first two- and images B4 and B5 in the second two places, with picture B3 last (see Table 9).

Table 9: Ranking of drawings of apples and pineapples by teachers and moderators

Ranking of drawings of apples (Total number of respondents = 13)	Ranking of drawings of pineapples (Total number of respondents = 13)
(13) / 100% of the respondents positioned drawings A3 / A5 in the first pair of places	(8) / 62% of the respondents positioned drawings B1 / B2 in the first pair of places
(12) / 92% of the respondents positioned drawings A4 / A1 in the second pair of places	(8) / 62% of the respondents positioned drawings B4 / B5 in the second pair of places
(12) / 92% of the respondents positioned drawing A2 in the last place	(13) / 100% of the respondents placed drawing B3 in the last place

Ranking patterns were almost unanimous for the apple drawings, with one respondent differing from the broad pattern. Patterns for the ordering of pineapples were strong but more varied than the apple drawings. It is thought that rankings of pineapple drawings were more varied than those of apples because some judged design qualities as more important than attributes traditionally associated with fine art, while others privileged fine art features. With the apple drawings design qualities did not really feature, judgment in this instance involving weighing up different fine art qualities. Reasons for ranking patterns within each set of drawings are explored in the following section.

4.2.4.3. Patterns in justifications of rankings

Despite efforts to narrow the focus of teachers'/moderators' judgements to technical competence, ranking patterns remained broadly rather than uniformly similar in both

sets of drawings. An attempt is made to explain the variety by exploring reasons for similarities and differences in judgements between respondents, with the aim of identifying elements of stability in judgement. It has been decided in the interests of simplicity and the goal of stabilising a standard against which learners' recognition could be measured, to explore only judgements pertaining to apple drawings, these being more similar than those for the pineapple images.

Reasons given by teachers in the sample and all moderators for the ranking of apples, although variously expressed, are easily grouped into strengths and weaknesses in seven areas. These are "use of tone", "use of line/pencil-mark/texture", "form", "realism", "unity", "decoration" and "originality" (see Appendix 7 for examples of interview notes). Strengths and weaknesses mentioned by individual respondents are shown for each drawing in Table 10 below. The table is used to identify patterns in reasons given.

Existence of patterns in reported strengths and weaknesses is explored within and between the judgements of individuals, and within and between judgements made for different sub-groups of drawings.

Two patterns have been identified within the judgements of individuals (see columns in Table 10), one of which is reference to different strengths and weaknesses when assessing different drawings. For example, strengths such as "form", "use of tone and texture" and "realism" are mentioned in relation to higher-ranking drawings, while "decorativeness" is given for lower-ranking counterparts. Another broad trend within judgements of teachers and moderators constitutes general decrease in numbers of strengths and increase in weaknesses named with progressive lowering in the ranking of images.

Comparing judgements across teachers/moderators shows some difference between them. Teachers 3A and 1A, and all moderators excepting M4, consistently mention certain weaknesses such as "form" or "realism", across judgements. Other teachers and moderators give different weaknesses for different drawings.

When comparing judgements passed on the 'top two' and 'bottom three' images, there is some variation in reasons given for placing drawings A3 and A5 in the top two positions, but most respondents mention one or more of the following four strengths: "use of tone", "use of texture", "form" and "realism" (see Table 11). Weaknesses in the same four criteria feature most commonly in judgements of the lower three images (see Table 12).

Placing of the top two images appears to involve discrimination between *different types* of skills in the presence of generally high skill levels. Comparing strengths and weaknesses mentioned for the two drawings shows which strengths are privileged in their positioning. Those placing A3 first do so because of control of "texture" and "originality", qualities perhaps rooted in the romantic tradition (see Section 2.11.1 in Chapter 2). Those for which A5 is the strongest image name competence with "unity" and "form", features esteemed in classical modes since the Italian Renaissance (see top two rows of Table 10, and Section 2.11.1 in Chapter 2).

Positioning of the second two drawings on the other hand, seems to involve judging *levels of the same sort* of skill. Comparing strengths given for drawings in the third and fourth positions shows that while individuals compare displays of single skills across the two drawings, different respondents focus on different skills. Some teachers/moderators for instance describe treatment of "form" in both drawings; others name differences in "texture" (see second two rows of Table 10).

4.2.4.4. Specific criteria for recognition

Exploration of justifications for rankings shows that teachers and moderators take several features into account even when judging relatively simple images such as observation drawings. It also reveals that judgement involves simultaneously weighing not only different types of skills but relative levels of quality within these skills, opening several possibilities for individual (subjective) privileging of features.

Comparing the types of strengths mentioned in association with high- and low-ranking drawings, and the frequency with which certain skills are named, shows that there is a relatively small and bounded set of shared sought-after features. Sought-after features constitute strong use of tone and texture, a sense of form, and realism –

features said by teachers and moderators to be present in strong drawings and lacking in weaker images (see Tables 11 and 12, which present the same data as that shown in Table 10, but in such a way so as to highlight sought-after art features). Differential privileging of these consecrated features becomes visible when the degree of consistency between individual judgements, and ranking of drawings in which high levels of skill were present, are considered.

Table 10: Strengths and weaknesses in apple drawings assessed by teachers and moderators[21]

Respondent	3A	3B	2A	2B	1A	1B	M1	M2	M3	M4	M5
Drawing	(A3)	(A3)	(A5)	(A3)	(A5)	(A3)	(A3)	(A5)	(A3)	(A3)	(A3)
in first	1,2,3,7	1,2,7	1,2,3,4	1,2,3,4	1,2,3,4	1,3,4	1,2,3,4	1,3,4,5	1,2,3	2,3,4,7	1,2,7
place	-	-	-	-	-	-	1,4	-	-	-	-
Drawing	(A5)	(A5)	(A3)	(A5)	(A3)	(A5)	(A5)	(A3)	(A5)	(A5)	(A5)
in second	1,4	3,5	1,2,4	1,2,3,4	1,2,3,4,5,6	1,2,4	1,3,4	2,4	1,3,5	1,2,3,4	1,3,4
place	7	1,2,7	4	2	3,5	7	2,3,4	3,5	3,7	4	7
Drawing	(A4)	(A4)	(A4)	(A1)	(A4)	(A1)	(A4)	(A4)	(A4)	(A4)	(A4)
in third	1,2,3,7	3	1,2,7	1,6	1,2,3	2	1,3,5	1,2,3,5,7	1,3,4	1,7	1,3,6
place	3,4	3,5	2,3,4,6,7	1,4	3,4	1,3	3,4	4	1,4	2,3,4,6	1,3,4
Drawing	(A1)	(A2)	(A1)	(A4)	(A1)	(A4)	(A1)	(A1)	(A1)	(A1)	(A1)
in fourth	3	6	2,3	1,2,4	4	1,3,6	3,4,6	4,6	1,2,3,4	3,4	1,3
place	3,5,7	3	1,2	1,2	2,4,6	2	2,3,5	1,3,6	1,3	1	3,5
Drawing	(A2)	(A1)	(A2)	(A2)	(A2)	(A2)	(A2)	(A2)	(A2)	(A2)	(A2)
in fifth	6	-	-	-	6	-	1,2	2,6	-	-	-
place	1,2,3	2,7	1,2,3,4,5	1,2,5	4	3,4	3,4,5	1,3	1,2,3,6	3,4	1,3,4

LEGEND:
'3A'/'3B'/'2A'/'2B'/'1A'/'1B' = teachers of school classes in the sample
'M1'/'M2'/'M3'/'M4'/'M5' = moderators in the study
(A1)/(A2)/(A3)/(A4)/(A5) = drawings of apples
1 = strong use of tone
2 = strong use of texture
3 = strong form
4 = strong sense of realism
5 = strong sense of unity
6 = strong decorative qualities
7 = originality
1 = weak use of tone
2 = weak use of texture
3 = weak form
4 = weak sense of realism
5 = weak sense of unity
6 = weak decorative qualities
7 = lacking in originality

[21] Since drawing strengths were described relationally, the same image was sometimes said to have strengths *and* weaknesses in the same Art qualities: these strengths and weaknesses were in fact described *in relation* to drawings ranked immediately after and before them.

Table 11: Strengths in the top two drawings

Drawing strengths	1	2	3	4	5	6	7
3A first drawing (A3)	x	x	x				x
second drawing (A5)	x			x			
3B first drawing (A3)	x	x					x
second drawing (A5)			x		x		
2A first drawing (A5)	x	x	x	x			
second drawing (A3)	x	x		x			
2B first drawing (A3)	x	x	x	x			
second drawing (A5)	x	x		x			
1A first drawing (A5)	x	x	x	x			
second drawing (A3)	x	x	x	x	x	x	
1B first drawing (A3)	x		x	x			
second drawing (A5)	x	x		x			
M1 first drawing (A3)	x	x	x	x			
second drawing (A5)	x		x	x			
M2 first drawing (A5)	x		x	x	x		
second drawing (A3)		x		x			
M3 first drawing (A3)	x	x	x				
second drawing (A5)	x		x		x		
M4 first drawing (A3)		x	x	x			x
second drawing (A5)	x	x	x	x			
M5 first drawing (A3)	x	x					x
second drawing (A5)	x		x	x			
Total number of times a feature was mentioned (in 22 judgements)	19	15	16	16	4	1	4

LEGEND:
'3A'/ '3B'/'2A'/'2B'/'1A'/'1B' = teachers of school classes in the sample
'M1'/'M2'/'M3'/'M4'/'M5' = moderators in the study
(A1)/(A2)/(A3)/(A4)/(A5) = drawings of apples
1 = strong use of tone
2 = strong use of texture
3 = strong form
4 = strong sense of realism
5 = strong sense of unity
6 = strong decorative qualities
7 = originality
x= feature mentioned by teacher/moderator
first drawing=drawing ranked strongest by teacher /moderator
second drawing=drawing ranked second strongest by teacher/moderator

Table 12: Weaknesses in the bottom three drawings

Drawing strengths	1	2	3	4	5	6	7
3A third drawing (A4)			x	x			
fourth drawing (A1)			x		x		x
fifth drawing (A2)	x	x	x				
3B third drawing (A4)			x		x		
fourth drawing (A2)			x				
fifth drawing (A1)		x					x
2A third drawing (A4)		x	x	x		x	x
fourth drawing (A1)	x	x					
fifth drawing (A2)	x	x	x	x	x		
2B third drawing (A1)	x			x			
fourth drawing (A4)	x	x					
fifth drawing (A2)	x	x			x		
1A third drawing (A4)			x	x			
fourth drawing (A1)		x		x		x	
fifth drawing (A2)				x			
1B third drawing (A1)	x		x				
fourth drawing (A4)		x					
fifth drawing (A2)			x	x			
M1 third drawing (A4)			x	x			
fourth drawing (A1)		x	x		x		
fifth drawing (A2)			x	x	x		
M2 third drawing (A4)				x			
fourth drawing (A1)	x		x		x		
fifth drawing (A2)	x		x				
M3 third drawing (A4)	x			x			
fourth drawing (A1)	x		x				
fifth drawing (A2)	x	x	x			x	
M4 third drawing (A4)		x	x	x		x	
fourth drawing (A1)	x						
fifth drawing (A2)			x	x			
M5 third drawing (A4)	x		x	x			
fourth drawing (A1)			x		x		
fifth drawing (A2)	x		x	x		x	
Total number of times a feature was mentioned (in 33 judgements)	14	12	23	16	7	6	3

LEGEND:
'3A'/'3B'/'2A'/'2B'/'1A'/'1B' = teachers of school classes in the sample
'M1'/'M2'/'M3'/'M4'/'M5' = moderators in the study
(A1)/ (A2)/(A3)/(A4)/(A5) = drawings of apples
1 = weak use of tone
2 = weak use of texture
3 = weak form
4 = weak sense of realism
5 = weak sense of unity
6 = weak decorative qualities
7 = lacking in originality
x= feature mentioned by teacher/moderator
third drawing=drawing ranked third weakest by teacher/moderator
fourth drawing=drawing ranked second weakest by teacher/moderator
fifth drawing=drawing ranked weakest by teacher/moderator

4.2.5. Learners' recognition and realisation in art and science

Note should be made of recognition in art as opposed to recognition in the science literature. Morais et al (1992) identifies three achievement phases, the first of which is "recognition" or the ability to select appropriate texts or "correct answers". The

second is "passive realisation" or an ability to "decode" appropriate texts. In the particular study (ibid.) upon which the present research hopes to build, this realisation comprises learners' explanations of their selection of answers in a multiple-choice instrument. The third part of achievement, "active realisation", is an ability to produce or "encode" relevant texts, in the science literature – an ability to use principles to problem-solve. Recognition is seen to precede passive realisation, and passive realisation to precede active realisation.

In the present research, learners' ability to recognise the degree to which sought-after qualities are present in drawings as manifest in their ranking of the images is used to define recognition. Learners' descriptions of their reasoning behind rankings are seen as passive realisation. Learners' exhibition grades have been taken as measures of active realisation.

I decided to simplify the concept of achievement in the current study, by framing it in terms of learners' recognition and active realisation. Since measures of passive realisation obtained in the form of learners' reasoning as to their aesthetic judgments are verbal and complex[22] and the focus of my research is on practical art-making, I focus on the non-verbal ranking of drawings and making of art-works.

4.2.6. Learners' recognition in the current study

4.2.6.1. Method for gathering recognition data

The recognition instrument was administered to the cohort of six final year classes in the sample in the penultimate year of the study (see Table 4 in Chapter 3)[23], following procedures described above. The task was completed under controlled conditions which did not admit consultation between individuals, and the researcher was present.

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22 Learners, like their evaluators, mentioned different strengths and weaknesses as the basis for their ranking of drawings in the task. Learners, especially those in lower social class positions, often used everyday language rather than art terminology, and some could not provide reasons for their rankings.

23 It is a weakness of the study that the recognition task was administered to one and not all cohorts of learners in the study. It is argued as in Section 3.5 in Chapter 3, that since achievement levels in each school class remain relatively constant over the four years of the study (see Figure 7 and Table 19 in Chapter 6), and since attempts have been made to control for other features that may have affected achievement (such as social class, race, and gender), the enduring feature associated with achievement is pedagogy. If pedagogy and achievement are consistent across the four years of the study, the fact that the task was administered to only one cohort of learners is of less consequence than would have been the case if achievement levels had varied more than they do.

Follow-up interviews were conducted with all individual learners to ascertain reasons for their rankings.

4.2.6.2. Procedures for analysing recognition data

Individual learners are said to have one of three levels of recognition. When their ranking of drawings matches the broad pattern shown by teachers and moderators, it is said to be 'high' and their judgements 'aligned' to those of the evaluators. When they place teachers' and moderators' top two drawings similarly in the first two ranking positions and the three weaker pictures differently, their recognition is said to be 'partial' or 'partly aligned' to judgements of evaluators. When the two top images selected by teachers and moderators are given lower rankings, learners are said to lack possession of recognition rules for sought-after features in pencil drawings from life, their judgements being 'non-aligned'.

4.3. Measuring realisation

Learners' art-works were needed for the measurement of ability to *realise* (produce) sought-after criteria. In order to facilitate comparison of learners' realisations across different contexts, relatively similar art-works were needed. It was not possible for me to set projects for final-year learners working under pressure towards exhibitions, nor was it a good idea to use single works that had been assessed by individual evaluators and which may have differed too widely in aim and end. Final-year art exhibitions for which there were identical requirements across schools of set numbers of works, certain levels of technical competence, manipulation of content and originality (see Section 4.1.2.2. above), were deemed most suitable for comparison.

Final-exhibitions although generally differing in appearance between schools, are all constituted by ten or more of the best artworks produced by learners in their last two years of secondary school, mounted and displayed as exhibitions. They are graded by learners' own teachers and examined independently by two external teachers. Following this, moderators move between schools, assessing displays in relation to those at other schools and the three awarded grades, and assigning final grades.

Two types of data were needed for measurement of learners' realisation in the form of final exhibitions: learners' percentage grades and, since similar grades were awarded for exhibitions differing in appearance, descriptions of achievements represented by the grades. The following sections cover methods for obtaining this data, and ways in which it was categorised.

4.3.1. Methods for obtaining realisation data

Two types of realisation data were needed: percentage grades and moderators' descriptions of exhibitions. Percentage grades were obtained by the researcher attending moderations. This attendance entailed accompanying moderators and class teachers as they inspected and graded exhibitions. In these sessions moderators were asked informally about what they looked for in exhibitions, field-notes were made, and lists of marks for each school class in the sample obtained.

Descriptions of exhibitions were obtained in interviews with moderators. Two[24] moderators in the study were asked in the penultimate year of the research whether 'A' grades are awarded for similar features across schools, and all claimed that this is not the case. One alluded to the observable fact that all school classes have distinct styles of their own "... it's almost as though there're common denominators; in some there aren't, but when they're there, you subtract them ...". Personal observation supports this claim: art teachers in the current study are identifiable through the art-works of their classes to the extent that inclusion of images of the art-works would violate the anonymity promised to respondents. Moderators were asked to describe common features in exhibitions within classes at the six case-study schools, and qualities for which they had awarded 'A' grades at each of the schools.

[24] In theory a single moderator is responsible for the moderation of exhibitions of between 40 and 50 schools in a region each year. In practice the moderator in the region studied called on others for assistance, and there were two or three moderators in each researched year. In the penultimate year of the study there were two moderators; each was asked to describe "common denominators" and what they had awarded 'A' grades for at schools of the six teachers selected for detailed research. In the final year of the study there were also two moderators who were asked to describe strengths in the exhibitions of three top-achieving learners at the six schools in the sample. It is a weakness of the study that moderators were questioned differently over the years. It is argued as in Section 3.5 in Chapter 3, that since achievement levels in each school class remain relatively constant over the four years of the study (see Figure 7 and Table 19 in Chapter 6), and since attempts have been made to control for other lurking features that may have affected achievement (such as social class, race, and gender), the enduring feature associated with achievement is pedagogy. If pedagogy and achievement are consistent across the four years of the study, the fact that moderators comment on the work of some learners and not others is of less consequence than would have been the case if achievement levels had varied more than they do.

Moderators in the final year of the study[25] were shown photographs of the exhibitions of the three highest and single lowest-achieving learners in each of the schools in the sample selected for detailed study, and asked to describe strengths and weaknesses in each display. They were asked to explain "Which displayed qualities did you award grades for?" and "What in this exhibition prevented you from awarding a higher grade?"

4.3.2. Procedures for analysis of realisation data

4.3.2.1. Coding of percentage grades

Learners' grades are divided into three categories on the basis of comments made by moderators during moderations in the years 2000 and 2001, and teachers in interviews (see Appendix 4). Grades of 80% and higher, awarded for high levels of technical and expressive competence as well as originality, are said to signify 'high' levels of realisation. Grades of between 60% and 79% inclusive, given in the presence of average technical skills in the 60's and technical skill plus "some ownership of content" in the 70's, are said to represent 'moderate' levels of realisation. Grades of 59% and lower, awarded when exhibitions show lack of basic technical skills, are said to represent 'low' levels of realisation.

4.3.2.2. Coding of moderators' descriptions

4.3.2.2.a Coding of "common denominators" and qualities for which 'A' grades were awarded

Moderators' descriptions of "common denominators" and qualities for which 'A' grades were awarded have been coded in Table 13 below, for the classes of each teacher in the sample selected for detailed study (see Appendix 8 for fuller notes on the interviews). Common denominators are expressed as artistic strengths or weaknesses exhibited by whole classes of learners. Strengths and weaknesses refer to interpretive (conceptual) content or technical skill, or both. Strengths in interpretive content are described in general terms, referring to a high degree of "interpretation of projects" (see qualities in for which 'A's' were awarded in case 3A in Table 13), or in specific terms such as "choice of subject matter – not a high level of interpretation, but compositionally" (see qualities for which 'A's' were awarded in case 1A in Table

[25] See footnote 4.

13). High levels of technical skills are also described generally as "technical skill" (see qualities for which 'A' grades have been awarded in cases 3A, 3B, 2B, and 1A in Table 13), or specifically, as for instance "enjoyment of painting ... a sense of mark-making and completeness, not just slapping (the paint onto paper)" (see qualities for which 'A's' have been awarded in case 1B in Table 13).

Coding of moderators' descriptions of common denominators and qualities for which 'A' grades were awarded is summarised in Figure 2 below. A hierarchy of artistic strengths is suggested using this interpretive frame (See Figure 2). The highest level of competence in this hierarchy comprises a combination of general technical *and* interpretive strengths. The lowest levels of competence comprise specific technical *or* interpretive strengths, or absence of skill. Mixtures of general and specific strengths or different specific strengths comprise intermediate levels of competence.

Table 13: Moderators' descriptions of "common denominators" and qualities for which 'A' grades were awarded for final exhibitions in one cohort of classes of teachers in the sample selected for detailed study

Case	Common denominators	Qualities for which 'A' grades were awarded	Summary of common strengths
3A	"visually rich, one can see layers"	"technical skill" "interpretation of projects" "big body of work"	Technical (general) Interpretive (general)
3B	"naïve", "romantic", "illusional" painting, "sentimental interpretation of life" "I still look for formal elements and technique, subject matter takes second place"	"technical ability" "bulk of work"	Technical (general)
2A	"technical weakness" "the images were very interesting. It wasn't the usual portrait and still-life. They were all multiple images, juxtapositions of spatial things, things in a space"	"less for technical skill, more where one gets a sense of layering, where there's visual layering"	Interpretive (general)
2B	"Technically they're not so competent" "Content-wise they're ... thinking learners, they think about what's happening around them ... [2B's] content is ... [high]"	"exploration of content" "technical ability" "bulk of work"	Interpretive (general)
1A	"the medium, the beautiful quality in the prints ... fine nuances in the work" "choice of imagery, juxtaposition of images"	"choice of subject matter – not a high level of interpretation, but compositionally, the perspective of the images. The strange copying of the images made for interesting composition" "very fine technical skill"	Technical (general) Interpretive (specific)
1B	"technically weak"	"enjoyment of painting ... a sense of mark-making and completeness, not just slapping (the paint onto paper)"	Technical (specific)

Legend
3A=School class with high social class; high-achieving
3B=School class with high social class; low-achieving
2A=School class with medium social class; high-achieving
2B=School class with medium social class; low-achieving
1A=School class with low social class; high-achieving
1B=School class with low social class; low-achieving

Figure 2: Summary of coding of moderators' descriptions of learners' final exhibitions

INTERPRETIVE CONTENT	
- Strong interpretive content	- expressed generally - expressed specifically
- Weak interpretive content	- expressed generally - expressed specifically
TECHNICAL SKILL	
- Strong technical skill	- expressed generally - expressed specifically
- Weak technical skill	- expressed generally - expressed specifically

SUGGESTED HIERARCHY OF SKILLS
Presence of technical *and* interpretive skills, both expressed in general terms
Presence of technical *and* interpretive skills, with one type of skill expressed in general terms and the other in specific terms
Presence of technical *or* interpretive skills, expressed in general terms
Presence of technical *and* interpretive skills, expressed in specific terms
Presence of technical *or* interpretive skills, expressed in specific terms
Absence of technical and interpretive skills

4.3.2.2.b. Coding of strengths and weaknesses in learners' exhibitions

Moderators' descriptions of strengths and weaknesses in the exhibitions of the three highest and single lowest achieving learners in classes of teachers selected for detailed study have been grouped into three categories, namely 'technical strengths', 'conceptual (interpretive) strengths', and 'originality' (see interview notes in Appendix 8). In the interests of simplicity, technical or interpretive weaknesses mentioned by moderators have not been coded. *Technical strengths* include all skills relating to art elements, principles, and pictorial composition such as the abilities to manipulate line, tone-range, texture, mark-making, shape, colour, proportion, perspective, depth, unity, balance, and skills with media. *Conceptual or interpretive*

strengths include all expressive, symbolic and personal subject-matter content, and evidence of depth and breadth in exhibitions. Strengths within the exhibitions of top- and lowest-achieving learners are categorised as 'general' when they refer to the presence of general 'technical skills' or 'interesting content' or 'originality'; and 'specific' when they are directed towards a single technique- or content-related skill, or originality of a single feature.

Time constraints meant that moderators could be interviewed to ascertain strengths and weaknesses in only a small number of exhibitions. Further, for the sake of simplicity, only the strengths of the small number of exhibitions are considered for analysis. The strengths of the exhibitions of the three highest and single lowest achieving learners in classes of teachers selected for detailed investigation are set out in the table below (see Table 14). School classes are ranked from that achieving the highest average grade, to that achieving the lowest (see Section 6.2 in Chapter 6).

In Table 14 it can be seen that in school classes with the highest average grades in the sample (classes of teachers 3A and 1A), exhibitions of three top-achieving learners had very high skill levels including technical *and* interpretive strengths, expressed in general terms. The lowest-achieving learners in these classes also had relatively high levels of skill. In the classes of other teachers in the sample selected for detailed study (3B, 2A, 2B, 1B), the top-achieving learners did not have uniformly high skill levels.

Table 14: Strengths in the exhibitions of the top three- and single lowest-achieving learners of teachers studied in detail in the final year of the study

	Technical strengths in top three exhibitions	Conceptual/ interpretive strengths in top three exhibitions	Other strengths in top three exhibitions (originality; impact; etc)	Strengths in the lowest-achieving exhibition
3A	General General General	General General General	General General General	General technical strengths
1A	General General General	General General General	General General General	General technical strengths
2A	General General Specific	General	Specific	Specific technical strengths
3B	General Specific Specific	General General	General General General	Specific technical strengths
1B	General General Specific	General General	General General General	General technical strength but at a low level
2B	General Specific	General Specific General	General General	Specific technical strengths

LEGEND:
General=moderators' comment on the presence of general "technical skills" or "interesting content" or "originality
Specific=moderators' comment on the presence of a single technique- or content-related skill, or originality of a single feature
3A=School class with high social class; high-achieving
3B=School class with high social class; low-achieving
2A=School class with medium social class; high-achieving
2B=School class with medium social class; low-achieving
1A=School class with low social class; high-achieving
1B=School class with low social class; low-achieving

4.3.2.3. Summary of descriptions of realisation in the sample selected for detailed study

Realisation is described in terms of 'high', 'moderate' and 'low' percentage grades. 'Common denominators' within the classes of single teachers relate to 'technical' and/or 'interpretive content (conceptual)' skills, and are expressed in general or specific terms. Moderators have identified 'technical' and 'conceptual' skills and 'originality' in the works of top-achieving learners. A hierarchy of competence levels has been identified, with *general* (overall) technical *and* interpretive skills at the top, and *specific* (single) technical *or* interpretive skills at the bottom. Intermediate skill levels comprise mixtures of general and specific strengths or different specific strengths.

Moderators' comments show that learners in high-achieving school classes have more different skills as well as higher levels of skill than their lower-achieving counterparts (see Tables 13 and 14). All top-achieving learners in the classes of teachers 3A and 1A have exhibitions showing general technical *and* interpretive skills, and originality. Even the lowest-achieving learners in these cases have *general* technical skills (see Table 15). In the remaining classes (2A, 3B, 1B, 2B) fewer top-achieving learners have general skills in all three areas – technical, conceptual, original – and some have only specific skills in a single area (see Table 15).

In the following section the relation between learners' recognition and realisation is explored.

4.4. Relations between percentage grades and recognition scores

Scatter diagrams and box and whisker plots (see for instance Figure 3 below) have been used to examine the relationship between percentage grades on the one hand, and 'aligned', 'partly aligned' and 'non-aligned' rankings (delineated as RR2, RR1, and RR0 respectively) on the other.

While a slight increase in percentage grades is seen with increase in recognition scores (see Figure 3), no clear interpretation of the relation between the two features could be made. Using Pearson Chi-Squared and Maximum Likelihood Chi Squared tests to assess the degree of interdependence between percentage grades and ranking scores, no evidence for direct association between them is found. Taking into account that separately both sets of features are ordinal, Gamma and Sommers' D-statistics show only a mild relation between the two categorical variables.

While recognition appears to be a pre-requisite for realisation by learners in science, this is not the case in art. In the current study more learners make aesthetic judgements aligned with those of teachers and moderators, than score over 60% for their final exhibitions. In other words, more learners show high levels of recognition than high levels of realisation. Further, almost all learners (86% of all learners in the sample) rank evaluators' top two drawings in the first two positions: in other words, almost all learners show some recognition. Recognition patterns in art suggest that

recognition often precedes realisation. However, not all learners achieving over 60% and even some of those scoring over 80% for exhibitions make aligned aesthetic judgements, or recognise evaluators' top two drawings as the strongest in the ranking task (see Table 16).

On the basis of this indirect relation between recognition and realisation I posit that in art, while recognition of sought-after qualities may precede successful realisation, it is sometimes the case that realisation precedes conscious recognition.

Figure 3: Box and whisker plot of learners' percentage grades and recognition scores

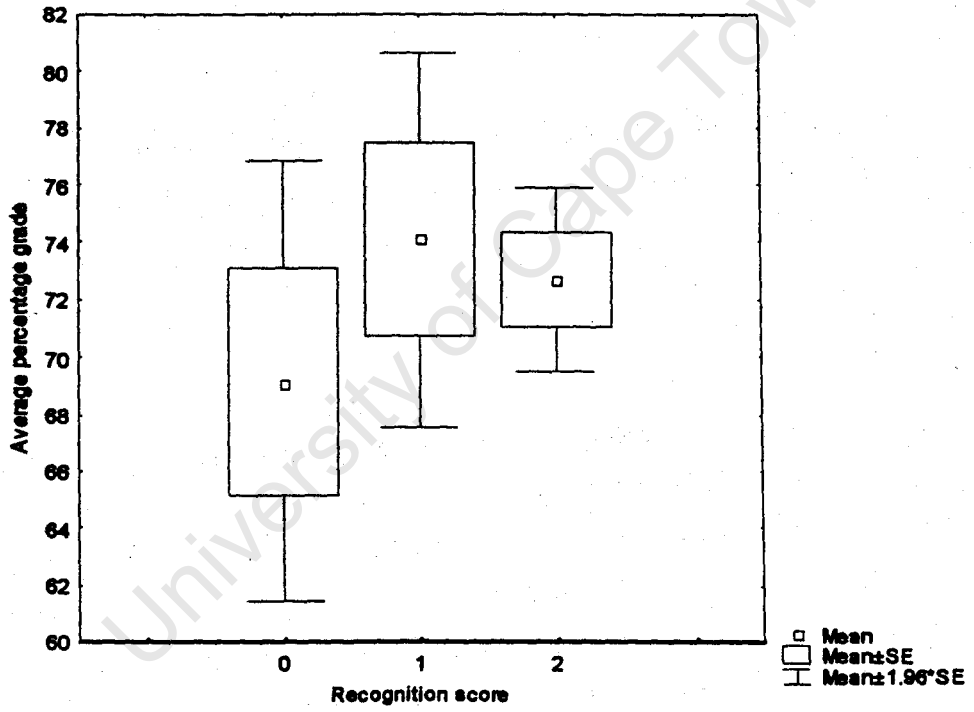


Table 15: Numbers of learners in specific percentage-grade and recognition-score categories

Recognition category (on right) Percentage grade category (below)	Non-aligned	Partly aligned	Aligned	Total number of learners
80%+	4	0	13	17 (17%)
60-79%	7	6	34	47 (46%)
0-59%	4	4	31	39 (38%)
Total number of learners	15 (15%)	10 (10%)	78 (76%)	103

An implication for the current research, of the indirect relation between recognition (recognition scores) and realisation (percentage grades), was that separate investigations had to be conducted to explore relations between social class, pedagogic features and each of these aspects of achievement. A decision was taken to focus on realisation (percentage grades) rather than recognition, in the main analysis of relations between pedagogy, social class and achievement. The reason for this focus was the relative importance of learners' grades in terms of what these scores represent in terms of practical skills acquired, what they signify in terms of facilitating entrance to tertiary art education.

4.5. Chapter summary

In this chapter a definition of achievement in art is delineated for the researched context. Achievement is described in terms of Bernstein's concepts of recognition and realisation, and the chapter outlines processes by means of which learners' recognition and realisation are measured.

Measuring recognition required knowledge of sought-after criteria. These criteria were obtained through interviews with teachers and moderators, and a task designed to elicit criteria by mapping teachers' and moderators' artistic judgements. Once patterns in evaluators' judgments had been established, the task was administered to learners and their judgments matched with those of their teachers and moderators. Learners' judgments are said to be 'aligned', 'partly aligned' or 'non-aligned' to those of their evaluators'.

Learners' realisation was measured in terms of percentage grades awarded for their final exhibitions, and descriptions by moderators of these displays. When describing exhibitions, moderators referred to technical and interpretive (conceptual) content skills, and originality, in general (overall) or specific (single-element) terms. It is possible to describe a hierarchy of degrees of competence on the basis of these comments, with general skills of more than one type at the top of the hierarchy, and specific skills of a single type at the lower end. Moderators' comments show that high-achieving learners and classes have more different types of skills as well as higher levels of skill than their lower-achieving counterparts.

The relation between possession of recognition and realisation rules was explored and found to be indirect: while some learners recognised sought-after qualities and were able to produce Art with these features, others produced high-achieving Art without making artistic judgments aligned to those of their evaluators. An implication of this indirect relation between recognition and realisation is that separate analyses of social class, pedagogy and each aspect of achievement needs to be conducted.

Analysis of relations between pedagogy, social class and percentage grades on one hand and aligned judgments on the other are the subject of Chapter 6. Pedagogy needs categorisation in order to carry out these analyses: this coding is the focus of the following chapter.

CHAPTER 5

PEDAGOGY: CODING OF DATA

Exploring relations between specific pedagogic features and achievement by learners in particular social positions necessitates detailed description of pedagogy in terms of its constituent components. This chapter describes how continuous data collected via classroom observation, fieldnotes, and audio-recordings, and discrete information obtained in interviews and through administration of questionnaires, has been coded. Categorised units of pedagogy are referred to as 'pedagogic features'. These features constitute any single measurable aspect of the pedagogic process.

5.1. Principles for coding data on pedagogy

Positioning the study in the mode of earlier work associating specific pedagogic features and the achievements of socially particular learners (for example Domingos 1987; Morais et al 1992 and 1995; Morais and Pires 2002) means use of the theoretical frameworks (Bernstein 1971; 1975a; 1975b; 1981; 1990; 1996; 2000b) or "internal language of description" (Bernstein 1996: 135) accompanying this research. This language has been used to develop an "external language" or "syntax" whereby data on pedagogy is described in a systematic way.

It is important to note that while the theory served to extend everyday observation by making me explore features I would not otherwise have considered, it did not restrict data collection and processing. Following the theory and previous studies, data are needed to describe pedagogy in terms of power and control relations. The concept of power is operationalised as the classification of 'discourses', 'space' and 'agents'. The idea of control is operationalised as framing of regulative (conduct-related) and instructional discourses. Instructional discourse is described in terms of the selection, sequencing, pacing and evaluation criteria of specialised knowledge. Most of the data collected is continuous and most is described in terms of power and control relations. New categories have been developed for features not classifiable using categories in the theory and literature.

The pedagogy of each teacher in the sample selected for detailed study was observed for the duration of one project of about twelve, all of which together made up the context for production of artworks for final exhibitions. Observed projects were conducted over between ten and 30 lessons, most of which were observed in each case. Projects consisted of different phases, typically an introduction and whole-class discussion followed by a planning phase of preparatory work and 'research', a 'doing' phase where final artworks were created, and a criticism phase. Several discussion and doing phases or doing and criticism phases were sometimes alternated: it was not possible as a researcher, to know which project phases would be included or how these would be sequenced or their duration – hence my observation of almost all lessons.

Coding procedures for observed pedagogy have been developed through an extended process involving movement between theoretical constructs, categories developed in earlier studies, and my raw data. To have a body of manageable data it was necessary to select from available texts. There were two selection principles. The first was that texts had to be representative of the pedagogy of which they formed part. Selecting representative texts meant inclusion of extracts in proportion to different project phases and types of teacher-learner interaction observed.

The second principle for selection of texts was the inclusion of sufficient or as much material as possible without this body becoming unwieldy, to attempt accurate characterization of teacher-learner communication relations. According to the two principles, the following were selected from available transcripts:

- All texts relating to introductions/discussions of observed projects, in full
- Approximately 90 minutes of representative texts from planning/doing phases of observed projects, including two lesson-beginnings and ends
- Samples of summative criticism sessions, the latter of which were relatively uniformly conducted in that the way in which teachers criticised individual learner's work was similar across different individuals
- Sequencing and pacing-related communications across all lessons in observed projects

After much working and reworking, observed pedagogy was categorised using 27 pedagogic features (these features are listed in Table 17 at the end of this chapter). Procedures used to code data are outlined in detail in the following section.

5.2. Procedures for coding data on pedagogy

Procedures for coding each pedagogic feature are described separately below. Features are grouped under 'power' and 'control' relations. Features describing power relations are grouped according to the concepts of 'classification of discourses', 'classification of space' and 'classification of agents'. Features describing control are grouped according to type of discourse (regulative or instructional).

It is not always clear whether particular pedagogic features should be categorised as classification or framing. An example of this difficulty can be made of Pedagogic feature 3b below: the amount of time teachers spent in individual learners' spaces interacting with them has here been categorised as classification of teacher-learner spaces; it is seen to denote the degree of separation of teachers' and learners' spaces. It can be argued however, that this same feature of teachers' interacting with individuals in their working-spaces could be categorised as regulative control.

Distinction between instructional and regulative discourse is not clear at times (see Pedagogic features 6c and 10b). While teachers' correction of learners' social behaviours such as chatting to fellow learners or walking around the classroom during art-making sessions can clearly be categorised as regulative, it is less clear whether correction of work-related behaviour should be classified as regulative or instructional (explication of evaluation criteria).

My response to the problem of the above-described difficulties regarding categorisation has been to categorise pedagogic features as 'classification' or 'framing' respectively, and make reasons and procedures for categorisation explicit. In the case of within-framing regulative or instructional categorisation I make a distinction between different points of reference in regulative discourse ('Art-specific' and 'social': see Pedagogic feature 6c), and show how some types of regulative

discourse can facilitate explication of evaluation criteria in instructional discourse (see Pedagogic feature 10b). Overall, there is more discussion of control of regulative discourse, than of classification or control of instructional discourse. This balance of discussion is unintentional: it emerged in the course of identifying *all* pedagogic features which appeared distinct. Some attention is given to the relationship between instructional and regulative discourse.

Sources of coded data, given for each item below, include transcripts of observed lessons; observation notes; teacher interviews (see Appendix 4); and responses to learner questionnaires (see Appendix 1). Categorisation of features in the current research is related to categorisation of features in similar earlier studies on achievement in science (see Morais 2002a).

5.2.1. Power relations

5.2.1.1. Classification of discourses: 'consecrated' (art establishment) versus 'unconsecrated' (not yet 'approved' by the art establishment) modes of expression

Classification of discourses refers to the degree to which discourses are specialised. Classification of discourses in the science literature (Morais 2002a) focuses on the boundary between science and everyday knowledge. In art classrooms, incorporation of learners' own life experiences into their responses to projects is almost always sought: the question arises as to the discourses from which school art is differentially distinguished. Answering this question necessitates identifying the nature of school art discourse, a difficult task given proclaimed absence of theory designed to distinguish between "art" and "not-art" (Tilghman 1984) in the first instance.

The school subject art includes drawing, painting, and at times design of utilitarian objects and performance art, but popular culture, folk arts and design are not generally included. School art's emphasis on the elements and principles of art, drawing from life, depiction of ideas, and explicit or implicit references to Western European art history and traditions of art suggest roots in early nineteenth century conceptions of 'fine art' with its theories of aesthetics and concepts of genius, art galleries and the discipline of art history, itself having grown in the wake of academic tradition begun in sixteenth-century Italian academies, described by Goldstein (1996).

Classification of school art discourse is described using the idea of "consecrated" or art establishment-approved art (see Chapter 2, Section 2.11.2.). In the case of South African secondary schools, art discourse is consecrated through reference to West-European tradition. Indicators for the classification of this discourse constitute all of the diverse aspects by means of which learners are exposed to consecrated art traditions, such as classroom displays, stored visual materials, teacher references to consecrated art, and exposure to consecrated art galleries and history of art. These different dimensions of pedagogy have all been used to delineate classification of discourses, as each contributes to the degree to which the school art discourse is specialised. The idea is that the greater the amount of exposure to consecrated art through these pedagogic features, the more strongly classified or specialised the art discourse. Each of these indicators has been dealt with individually below in order to ascertain in later analysis, which of the features is associated with achievement.

The degree of specialisation of categories, from highly specialised or distinct or pure, to weakly specialised or mixed, is described in terms of strength, as 'very strong' (++), 'strong' (+), 'weak' (-), or 'very weak' (--). These values are recorded in numerical form (4,3,2,1 respectively) for analysis (see Chapter 6).

Pedagogic feature 1a: Two- and three-dimensional art displays on walls and open areas in the art classroom and school (data source: observation notes)

Art discourses as tacitly manifest in classroom displays are assigned classification values. The criterion for the purity of art discourse is the presence of originals or reproductions of works by artists working in formal art traditions, and by present/past high-achieving learners, as noted in observation notes.

C + + displays show only works by consecrated artists and/or past/present high-achieving learners

C + displays show works by consecrated artists and/or past/present high-achieving learners, as well as that by learners with varying skill levels

C - displays show works by past/present learners with varying skill levels, and there are no works by consecrated artists or past/present high-achieving learners

C - - displays include works by past/present learners with varying skill levels, works in unconsecrated styles, and there are no works by consecrated artists or past/present high-achieving learners, or, there are no displays

Pedagogic feature 1b: Visual materials stored but available for use by learners, in the art room and school library (Data sources: observation notes; interviews with librarians/teachers)

Art discourses as tacitly manifest in stored visual materials are assigned classification values based on counts of fine art books, posters, videos and compact discs in the art-room and school library, as shown below. The criterion of purity of art discourse is the number of fine art items as opposed to popular visual materials such as newspapers, magazines and other imagery stored at the school. The higher the number of fine art items, the purer the discourse.

C + + over 500 Fine art items stored at school
C + 250-500 Fine art items stored at school
C - 100-250 Fine art items stored at school
C - - under 100 Fine art items stored at school

Pedagogic feature 1c: Direct reference to consecrated visual materials by the teacher, verbally and/or visually, when introducing/facilitating the carrying out of a project (Data sources: teacher interviews and transcribed texts of selected lessons in the observed project)

Classification values for teacher references to 'consecrated' visual materials are based on percentages of recounted projects in which references are said, in interviews, to have been made, visually or verbally. Examples of actual references, allusions to aspects of artist's works and styles and art movements have been counted in the introduction and 90 minutes of the planning/doing phases of observed projects, and recorded to provide an indication of the degree to which references may have been provided to learners. Visual references consist of teacher actions such as pointing to pictures in consecrated books. An example of a verbal reference to a consecrated style occurs in the following extract from an introduction to a project.

T: ... I've spent two entire lessons talking about Cubism. When I say that word – what jumps into your head? ...
CML: Geometrical shapes
T: Geometrical shapes, very much so. But there's something else – [aren't] there are two types of Cubism? ...
SevL: Analytical and synthetic Cubism
T: Analytical and synthetic Cubism – there're two different approaches – the first one ... analytical, and then it went into synthetic. The one meaning analysing – pulling something apart, and then recompiling ... Putting together from basically nothing –

> that's where collage came from ... You're gonna work with the analytical approach of Cubism. We're gonna start off by me allowing you five minutes of drawing from the object. Then I'm going to ask you ... to move from say six o'clock to three o'clock – just one quarter of the class [circle] – and you sit down again and continue with the drawing from a different angle ...

Classification values have been assigned as follows:

C + + references to consecrated material made in over three quarters of projects
C + references to consecrated material made in half to three quarters of projects
C - references to consecrated material made in quarter to half of projects
C - - references to consecrated material made in less than a quarter of projects

Pedagogic feature 1d: Degree of exposure of learners to current original art in consecrated institutions such as non-commercial galleries and studios (Data sources: teacher interviews; learner questionnaires)

A count of the number of visits to galleries, consecrated artists' studios, and/or artist-in-residence programmes by most learners in a class, over the last two years of secondary school, has been used to assign classification values to learners' exposure to art institutions. Numbers of visits directly facilitated by teachers, as well as those by learners outside of school hours possibly made in response to teachers' recommendations, have been included. Information on official visits was obtained from both teacher interviews and item 16 on the learners' questionnaire, and on learners' individual visits from item 17 on the questionnaire.

C + + more than four gallery visits per year by all/almost all learners
C + three or four gallery visits per year by all/almost all learners
C - one or two gallery visits per year by all/almost all learners
C - - no gallery visits by most learners

Pedagogic feature 1e: Learners' exposure to history of art in the classroom (Data sources: class lists; observation notes; learner questionnaires and interviews)

At the time of the current research, the 'Interim Core Syllabus for Visual Art' (Western Cape Education Department [WCED] 1995, 1995a, 1998-9) was in use. Art as a school subject could be taken on three levels: "higher grade", "standard grade", and a practical specialization such as "painting" or "graphic art" on the standard grade. Higher and standard grade Art included history of art and research and practical components, while practical specialization on the standard grade consisted of practical work and a single research essay. There was minimal difference in the

content of syllabi for art "higher" and "standard" grades and these were usually taught simultaneously in the same classroom. Differentiation was mainly in examinations, where the weight of the history mark was less for standard than higher grade, and different skills were required.

History of art together with research projects counted roughly half, and a third, respectively, in the final marks for art on the higher and standard grades, with practical work making up the balance. Learners doing art on the higher grade were expected to be able to "compare" (point out similarities/differences in ordered sequence), "discuss" (present various points of view), and "interpret" (show critical thought and insight, and present own ideas and opinions, supported by examples), while those on the standard grade were required to "describe" (identify characteristics), "relate" (retell in own words), and "discuss" (broadly present various points of view, possibly incorporating own points of view) (WCED 1995a; 1998-9).

Classification values have been assigned for 'exposure to history of art in the classroom' according to the percentage of learners in a class doing history of art, irrespective of whether they were doing so at higher or standard grade levels.

It cannot be assumed however, that learners have a working knowledge of imagery from the history of art just because they attend lessons. An attempt to assess learners' awareness of history of art was thus made by analysing item 21 on the learners' questionnaire. This item asks for indication of recognition of ten art movements/styles commonly covered in the syllabus, and the naming and/ or description of specific artists/images associated with these movements. Learners score one point for each specific artist/image named/described, with a maximum score of ten. Percentages of learners with 'high', 'moderate' and 'low' scores (scores of seven and higher, three to six, and under three respectively) have been recorded for the classes of each teacher. These scores have been used to modify classification values as follows.

C + + Over three quarters of learners take history of art as a subject *and* show high recognition of movements or styles in the learners' questionnaire

C + Half to three quarters of learners take history of art as a subject *and* over half show high recognition of movements or styles in the learners' questionnaire, or, over three quarters of learners take history of art as a subject but less than

three quarters show high recognition of movements or styles in the learners' questionnaire

C - Quarter to half of learners take history of art as a subject and over a quarter show high recognition of movements or styles in the learners' questionnaire, or, half to three quarters of learners take history of art as a subject but less than half show high recognition of movements or styles in the learners' questionnaire

C - - Less than a quarter of learners take art history as a subject and any number show high recognition of movements or styles in the learners' questionnaire, or, quarter to half of learners take history of art as a subject but less than a quarter shows high recognition of movements or styles in the learners' questionnaire

5.2.1.2. Intra-disciplinary classification of discourses

Pedagogic feature 2a: Different art languages referred to by the teacher (Data sources: teacher interviews; transcripts of observed lessons in the observed project)

In previous research (Morais 2002a), intra-disciplinary relations are described in terms of relationships between different themes or sub-sections in science. There is no corresponding compartmentalization of art contents. Teachers have however been observed exposing learners to different styles, in some classes more than in others. It is possible to discuss the degree to which exposure to styles varied.

In the absence of written project outlines, teachers' responses to an interview item are the main source of data used to assign classification values to their use of art 'languages' (such as high realism, Surrealism, abstraction, Impressionism, Post-Impressionism, analytic and synthetic Cubism, Fauvism, and others). The item asks for information on all projects done by the researched classes over the two final years of secondary school, including descriptions of outlines, introductions, opportunities for learner selection, and evaluation criteria for the projects. Classification values for the use of art 'languages' are based on numbers of references to different languages.

C + + very strong separation of languages through reference to only one or two languages in two years (or approximately twelve projects)

C + strong separation of languages through reference to four languages in two years (or approximately twelve projects);

C - weak separation of languages through reference to five or six languages in two years (or approximately twelve projects);

C - - very weak separation of languages through reference to seven or more languages in two years (or approximately twelve projects)

"representations of space" or official uses of space, and "representational space" or subjective experiences of space. The duration of teacher-learner interactions is seen as "spatial practise" – interactions being the sum of all teacher-learner communications (with individuals or groups) until the teacher moves to subsequent individuals or groups. An example of a single interaction with eleven turns in which a teacher aims to get a learner to focus on work, follows.

T: (to a learner not working) Why're you not painting? (gently asked)
CML: I knew you were gonna ask me, but it's a long story
T: What's the story?
CML: I'm not doing it here, I'm doing it at home and I'm gonna bring it
T: Are you working at home?
CML: Ja
T: Ja but don't you wanna work on a bit of the drawing then or something? (said very gently). It's called therapy.
CML: No (laughs) – must I do some drawing?
T: Probably (laughs)
CML: (Indistinct)
T: (Laughs)

It could be argued that the length of teacher-learner interactions relates to control of communication-relations rather than the separation of individuals: this conflict is an example of the difficulty of distinguishing between the notions of classification and framing. I maintain that amounts of teacher-learner interaction time indicate the degree to which teachers and learners occupy the same physical or metaphorical space, regardless of whether the teacher is initiating, furthering, or in other ways controlling the interactions, or not.

Time intervals were noted very frequently but not regularly in classroom observations and when transcribing audio-recordings. Teacher-learner interaction times are estimated using recorded times. Interactions are said to be 'brief' when consisting of fewer than six turns or lasting for less than thirty seconds. They are of 'medium' duration when there are between six and twelve turns, or last between thirty and sixty seconds. Interactions are 'long' when constituting more than twelve turns or extending beyond a minute.

Percentages of more-than-brief interactions in 90 minutes of the planning/doing phases of observed projects have been used to code classification of teachers and learners on the basis of teacher-learner interaction-time, as outlined below.

C + + under a quarter of interactions of 'medium' or 'long' duration
C + between quarter and half of interactions of 'medium' or 'long' duration
C - between half and three quarters of interactions of 'medium' or 'long' duration
C - - over three quarters of interactions of 'medium' or 'long' duration

5.2.1.4. Classification of learner-learner spaces

Pedagogic feature 4a: Learner-learner use of space in art making lessons (Data source: observation notes)

Classification of the use of space by learners is based on data in fieldnotes. The structure and use of space by learners, treated as separate items in the analysis of pedagogy in science, are combined here because although the structural layout of furniture may be fixed, use of space in art always involves some movement of learners, ranging from materials-collecting trips to those involving looking at the work of others.

Assignation of classification values is based on descriptions of arrangements of learners' tables and movements around these, in 90 minutes of the planning/doing phases of observed projects, as follows:

C + + learners in separate individual areas with little movement between these
C + learners in clusters of two or three with little movement between these
C - learners in groups of four or more with little movement between these
C - - learners group and regroup themselves with relatively free movement

Pedagogic feature 4b: Utilisation of materials by learners in art making lessons (Data source: observation notes)

It appears that the main reason learners in upper middle-class classrooms move into each others' spaces is to interact with (talk to) each other, while the main reason for similar movement in lower middle-class settings seems to relate to the availability and sharing of materials. I have decided to measure learners' intermingling and sharing of materials separately (see Pedagogic features 4.a and 4.b respectively), since these aspects of use of space potentially have different implications for pedagogy and

learner achievement. Sharing of materials is, in a sense, a proxy for learners' intermingling in certain social contexts.

Classification of learners' use of space to share resources is based on data in fieldnotes and an item in the teacher interview asking for description of materials supplied. The distribution and use of materials by learners, treated as separate items in the analysis of pedagogy in science, are combined here because in art classrooms all learners use available materials. Assignation of classification values for learners' intermingling to share materials is based on the degree to which materials were individually owned or communally provided and used, as follows.

C + + most learners have all/ almost all their own materials, there is no/almost no intermingling for sharing resources
C + most learners have most of their own materials, there is a little intermingling for sharing of resources
C - most learners have some of their own materials, but many materials are communally shared and there is considerable intermingling to share resources
C - - most learners have no or few materials, all/almost all share communal materials and there is continual intermingling to share resources

5.2.1.5. Classification of agents

In previous research (see for instance Morais 1997), classification of agents focussed on the hierarchical relations between the teacher and learners. Classification of teachers and learners as agents was at first excluded in the current research as it was thought that it would always be strong. When variation in classification of teachers and learners as agents was later suggested by patterns emerging in analysis of other pedagogic features, it was too late to construct categories uncompromised by this knowledge. Classification of agents thus refers here to the degree to which there is differentiation between learners.

Pedagogic 5a: Degree of differentiation between learners (Data sources: observation notes; transcripts of selected lessons in the observed project)

Four ways of speaking of classification between learners can be conceived using the current data set. One involves differentiating between 'high' and 'low' ability learners: in some classes teachers' communications appear to suggest such differences

and in other classes no distinction is perceived. This distinction is however difficult to measure without a working knowledge of learners' grades.

A second way in which classification of learners can be defined is by distinguishing 'higher' and 'standard' grade learners, the former doing more history of art than the latter. It is possible to speak of higher and standard grade learners being mixed or taught separately in different classrooms, and 'active' or 'passive' exposure to history of art. It makes more sense though, to describe these features as 'classification of discourses', given their reference to presence or absence of art history, and problems of categorisation when classification of 'all-standard grade' and 'all-higher grade' classes is similarly strong.

A third and useful way of speaking of classification of learners involves the degree to which learners are 'communalised' or 'individualised'. In observed art-making sessions teacher-learner interaction groups involve small or whole-class groups (interaction is communalised), or single learners (interaction is individualised). Classification or the degree to which learners are individualised or communalised is thought to be important as meaning is negotiated in interaction groups: it is expected that in some contexts meaning is easily negotiated between individual learners and the teacher, while in other settings meaning is communally created in ways not feasible for individuals alone.

It can be argued that the degree to which learners are communalised or individualised is a framing rather than a classificatory issue, that communalising gives learners more control over communication than does individualising, and that the degree of individualising has to do with hierarchical relations between learners. I however categorise the individualisation of learners in terms of classification to delineate the degree of separation between learners, separation signifying the degree to which learners' voices are distinct. Control of communication is discussed elsewhere (see Pedagogic feature 6b below).

Interaction-groups comprise participants in teacher-learner interactions, these interactions defined as all communications between teachers and individual learners or groups, the sum of all teacher-learner turns, until the teacher moves to subsequent

learners. Interaction groups in all teacher-learner interactions in 90 minutes of the planning/doing phases of observed projects have been categorised as 'individual', 'whole class' or 'small group'. The following transcript shows interaction between a teacher and an individual learner, in which there is individualisation of a learner's voice: the teacher and learner discuss inclusion of a written quotation in an artwork based on the quotation.

T: Okay, talk to me about this one (drawing)

WFL: Must I explain?

T: Ja

WFL: Well I can't decide. I really have enjoyed this and I feel emotionally tied to the work. So I wanna finish it off well, and didn't wanna rush it. But um. Ja. I'm sure. I had the whole idea about the quote, but I think it works better on here

T: Ja, I think so too

WFL: I just really liked it, and I think that's what it was all about ... But I think it should be like an extra appendage, like written on the side

T: Like written on the frame, or –

WFL: Ja. Something like that –

T: You shouldn't just plonk it on the image –

WFL: Ja, I just think it would detract

T: Um

WFL: Maybe I could type it out and stick it on or something

T: Um I'm just trying to think – the kind of inside edge – um –

WFL: Must be darker

T: Ja. And then – I think maybe keep the white, but then kind of cut it off cleanly and draw the lines on black – what do you think?

WFL: Okay

T: You don't have to mount it, I mean you could even just paint it. So ... if you kept, say, that much of the white, made the inside edge very clean and crisp –

WFL: Ja

T: And then ... mounted it on black. I think that would work –

WFL: I dunno – I still have this idea of sticking it on to handmade paper – d'you think it's maybe not a good idea?

T: Well – would you cut it out – just explain how you would do it –

WFL: Probably I would tear it, along the white, and make it more –

T: Ja

WFL: Maybe I should make that bigger – draw a line and tear it and then put it on handmade paper – I dunno – maybe get a big piece

T: And what if you – if you're gonna put it on handmade paper – because the texture of handmade paper's quite similar to the texture of that white. So you cut the white off completely –

WFL: Ja

T: And then put it straight onto the handmade paper –

WFL: I don't wanna be too – d'you think I should cut it straight? I don't wanna be too cliched but I like the rough look

T: You can try that

WFL: I can always cut it off a bit less as well

T: Ja I think you – if you're going to put it on white paper, you need to get rid of the white you know, the stuff around the outside.

WFL: I think I wanna do something different – I don't just wanna stick it on another piece of cardboard

T: Okay. Can you get a piece of homemade paper that big?

WFL: Ja – a friend of my mom's makes it

T: Okay, and if it doesn't work? What's it gonna cost you?

WFL: I dunno, I think about ten rand – I care enough about it to try it, I'll give it a try

T: Well do me a favour: when you get it, just try it on straight with ... clean edges before you tear it – um –

WFL: Ja okay, I'll try that

The following excerpt shows small-group discussion of ideas: a teacher and three learners discuss use of a particular public monument in an artwork in which learners were required to select known monuments and create images which essentially made visual commentary on these memorials. Ideas are communally built by the teacher and three learners in the extract: voices are not specialised on an individual basis.

CFL: Sir can I draw this monument? (Points to a public memorial figure inscribed with 'My hinterland lies here', in a pose reminiscent of a Hitler-salute)

T: Ja

CFL: I'm gonna leave (situate) it here, but I'm gonna change him (the sculpted figure), make him Hitler. But then I need a destructive background, like thorn trees ... Sir, what can I make him stand for?

T: Think about it – what does Hitler stand for? Socialism? Fascism? You must go and do some research ...

CFL2: Definitely political ...

CFL: What are you saying?

T: You must do some research into it

CFL3: He made the roads

CFL2: Rhodes made the roads

T: That's the English point of view. Look around, don't just use the first sculpture you could find – don't make that your first choice

CFL: Hinterland, Hitlerland

T: Now that's the first thing – yes – play around with it

When teacher-learner interactions involve single learners, classification of learners is said to be stronger than when groups are involved. Classification of learners is based on percentages of teacher-learner interaction groups in approximately 90 minutes of

the planning/doing phases of observed projects, in which communications are individualised.

C + + Almost all interaction groups involve teachers and single individuals; fewer than a quarter include more than one learner
C + Most interaction groups involve teachers and single individuals; between a quarter and a half include more than one learner
C - Some interaction groups involve teachers and single individuals; between half and three quarters include more than one learner
C - - Almost no interaction groups involve teachers and single individuals; over three quarters include more than one learner

5.2.2. Control relations

Control relations are discussed in relation to the hierarchical rules in regulative (conduct-related) discourse and discursive rules in instructional (knowledge-related) discourse. The locus of control, lying with teachers or apparently with learners or between these two extremes, is described in terms of degree of teacher or apparent learner-control. Control ranges from very strong teacher-control (++), through strong teacher control (+) and weak teacher control (-), to apparent learner control (--). These values are recorded in numerical form (4,3,2,1 respectively) for analysis (see Chapter 6).

5.2.2.1. Regulative discourse/hierarchical rules

Regulative discourse is difficult to categorize for two reasons. First, some previously used indicators such as "when pupils give their opinions" or "intervene with the wrong texts", and continua from "slapping" to "reasoning with" children (Morais 2002b) are not suitable for the secondary school and art focus of the current research.

A second difficulty with characterizing regulative discourse arises in that it is not always easy to distinguish regulative from instructional communications. Some, like "Shht! Listen now", are clearly regulative. Others, like "You must work on a smaller scale hey, otherwise you're not going to finish", "go to the library quickly, you must find some pictures of that to work from", "Think about what's light and what's dark ... cause at the moment all you're doing is some nice wall painting: one colour, another colour over, slapped on ... Dulux here we come", while appearing at first glance purely instructional, could also be seen to be referring to "conduct, character,

and manner" (Bernstein 1990). After much deliberation, such communications have been analysed through both instructional and regulative 'lenses', as conduct-related (regulative) comments (see Pedagogic feature 6c) and as a means to increase or lessen the clarity of evaluation criteria (see Pedagogic feature 10b). All communications referring to learners' conduct have been characterized in regulative terms.

The following indicators for characterization of regulative discourse have been derived from much theory-data conversation, attempts to use existing theoretical categories as well as what the data itself suggested.

Pedagogic feature 6a: Learners' entry to/exit from the classroom (Data sources: observation notes; transcripts of selected lessons from the observed project)

Framing values for learners' entry to and exit from the classroom are based chiefly on the degree to which learners' entries and exits are formal, and secondarily on social relations manifest in teacher-learner interactions leading up to and after instructional teaching/learning at the start and end of lessons respectively. Categorisation is based on two lesson beginnings and two endings considered typical.

Social relations are said to be 'horizontal' when teachers' regulative comments are characterized as "inter-personal" (Bernstein 1971; Morais and Neves 1997), comprising personal appeals, emphasizing advantages and disadvantages of actions and leaving hierarchical teacher-learner relations implicit. It is expected that such comments will take the form of requests and statements with explanations. Examples are "please sit down"; "I cannot start if everyone's not seated and listening – otherwise you're not gonna hear what I'm saying, so please sit down"; "You should be seated by now" or "You should be seated if you're going to see properly".

Social relations are said to be 'hierarchical' when teachers' regulative comments are characterized as "positional" or "imperative" (Bernstein 1971), when they emphasise group characteristics or show clear displays of authority. It is expected that such comments will take the form of questions and commands, probably without explanations. Examples are "Why aren't you sitting down?"; "Why aren't you sitting? You won't be able to see" and "sit down".

Requests, statements, questions, commands and explanations have been identified in transcripts of regulative texts from two lesson beginnings and two lesson ends, as in the example below. The following excerpt comprises all verbal teacher-learner interactions from the moment learners arrive in the classroom to the start of instructional interaction.

T: Just hang on – sit down – I'm gonna explain everything in a minute [*command with explanation*]. Come on people, please sit down [*request*]. Llewellyn, please sit down [*request*] ... Put that bucket away [*command*]. Why're you late, Ahmed? [*question*]

CML: (inaudible)

T: I didn't hear that – sit down please. We're 10 minutes into this lesson already [*request with explanation*]. Please organise yourselves [*request*] – sit down now [*command*].

CML: Where must we sit?

T: Sit in the outside circle ... Mr. Manie – Ahmed[26] – you walk in here late and then you've got the arrogance to stand around here talking [*statement*]. Organise yourself, sit down somewhere [*command*]. Elevens. I cannot start this if everyone's not seated and listening – otherwise you're not gonna hear what I'm saying so please sit down now [*request with explanation*]. I wanna appeal to you also: do not arrive 10 minutes late. If you're late with another subject and the bell goes, it's my time, okay – get yourself to the art class. Or you speed off here to get my permission to continue there. I'm very flexible, you know that. But when I wanna do a specific project, I need you guys to be on time [*request with explanation*]. Okay ... (proceeds with lesson)

Framing values for learners' entry to and exit from the classroom have been assigned as follows:

F++ Formal entry/over three quarters of comments suggest strongly hierarchical relations
F+ Formal entry/half to three quarters of comments suggest strongly hierarchical relations
F- Informal entry/quarter to half of comments suggest hierarchical relations
F-- Informal entry/less than a quarter of comments suggest hierarchical relations

Pedagogic feature 6b: Control of communication in the 'planning/doing' phase of practical art-making projects (Data sources observation notes; transcripts of selected lessons from the observed project)

Control of communication between teachers and individuals on the one hand, and teachers and small groups of learners or the whole class on the other, in 90 minutes of the planning/doing phases of observed projects seems an important indicator of

[26] All names have been changed to preserve the anonymity of research subjects.

framing of regulative discourse, although different categorizations of this feature are possible. Learners in some contexts appear to participate freely in discussion associated with the project and in banter, and communication relations seem open, while those in other classes say mostly "mmm" or "Yes Miss", and communication relations appear more closed. It also seems that some teachers build on what learners say or try to open communication relations with them, while others ignore or do not do these things.

Control of communication was first framed in terms of the lengths of learner communications and teachers' responses to these. Learner communications were categorized as 'brief' (under 10 words) or 'elaborated' (ten or more words), and teacher responses similarly as 'brief', 'elaborated' or 'ignoring'. Teacher responses to all learner interjections or turns in 90 minutes of the planning/doing phase of observed projects were characterized and counted.

Counting comments thus categorized showed that that although some teachers ignored more learner interjections than others, all teachers did ignore some, and none ignored more than 10%. Further, all teachers made roughly twice or three times the amount of elaborated comments than did learners. Differences between teachers were thus not as varied as expected.

Control of communication is now framed in terms of the percentage of individual or group teacher-learner interactions in which teachers actively open discussion or communication around learner comments or actions (work and non-work related). In these interactions, teachers are seen to be opening discussion or communication relations when using devices such as tentative language ("you could" or "you might") and gentle banter, rather than imperative language ("you must" or "you 'should") or sarcastic banter; mirroring, repeating or encouraging learner comment ("exactly, exactly"); elaborating exactly topics learners have begun, and using 'opening' statements or questions ("I don't understand exactly what you mean by ...").

Interactions are considered open when learner comments beyond brief one or two-word responses are *invited* by teachers, even when only one opening device, such as some tentative language, a gentle bantering tone, or a single question is used. They are

also considered open if teachers use opening devices and learners do not take up opportunities to respond.

The interaction as unit of analysis is defined by teachers' movements between learners: a single interaction consists of all communications between teachers and individual learners or groups, the sum of all teacher-learner turns, until the teacher moves to subsequent learners. In the following extract the teacher addresses a learner chatting rather than focussing on work, opening communication with questions in a gentle bantering tone.

T: Why're you not painting?
CML: I knew you were gonna ask me, but it's a long story
T: What's the story?
CML: I'm not doing it here, I'm doing it at home and I'm gonna bring it
T: Are you working at home?
CML: Ja
T: Ja but don't you wanna work on a bit of the drawing then or something?(said very gently). It's called therapy
CML: No (laughs) – must I do some drawing?
T: Probably (laughs)
CML: (Indistinct)
T: (Laughs)

The following interaction took place in a public garden: learners were walking around in search of monuments to sketch for a project in which they were required to make visual commentary on a memorial. The teacher opens communication with use of tentative language ("could") and banter.

T: (Smiling, to a group of boys at a public fountain, looking for images to draw) No fishing boys
CML: Fishing – why not?
CML2: Can I do this and dedicate it to the fishing industry?
CML3: Why d'you wanna do that, it's not a monument –
T: Um
CML2: Culture, you convert it
T: No, but you could do a monument there – do you understand? (laughter) You could use the base and the water and all the rest, and you could change what –
CML3: Dedicate it to a fishing boat or fishing –
T: To the Portuguese fishing industry
CML: (Indistinct)

CML2: He's talking about –

T: I'm talking about why do an 'I & J' thing when you could do like ... (local fishing industry), all the illegal over-fishing

CML: Did they get off?

T: No ... we're just talking rubbish

CML: Okay

The following excerpt shows exploration of a learner's idea for which she wants to create a visual representation in the form of a painting. The teacher opens communication by repeating and encouraging the learner's comments, and questioning aspects of her idea in detail.

CFL: Miss, I'm going to do something to do with love

T: Love – okay – there's one [sculpture] called 'The Lovers' – something symbolic – What's your topic?

CFL: Open

T: Okay, now what does love mean to you? What's the first thing?

CFL: Um – trust

T: Trust – okay – so why don't you quickly write something down – about love – What you consider love to be. There're two kinds of love ... Love can be in connection with somebody else, or it can be a connection with part of yourself – that's what the tarot means ...

CFL: Mmm

T: Pry what it means – trust is one, okay, what else?

CFL: Friendship

T: Friendship, okay, what are the other concepts of love?

CFL: Beauty

T: Okay, what else?

CFL: Joy

T: Okay, so what else?

CFL: Um –

T: You tell me which one you are looking at

CFL: What do you mean?

T: I'm just saying you must think about that, because that will inform the image. Love for your country would be – South Africa – what it represents to you, many cultures, a country that's come out of a great struggle. Love for a lover – that would be more personal, more intimate

CFL: That's the one

T: So that's what you wanna do – it's for a boy probably, hey

CFL: Ja (laughs)

T: Okay, well, we need to set that out. It's between two people that in a way mirror each other, don't they. So how're you gonna show that – how're you gonna show that feeling? ...

The following transcript originated in a drawing session in which learners were required to make compositional sketches based on accurately drawn aspects of a still-life in the centre of the room. The teacher closes communication by asking a closed-ended question.

T: For a person – watch out for that, it doesn't look like that generally, you're just drawing without painting from (the object) – count those things that're hanging there (points to finger digits of skeleton in the still life) – now are they all the same?
CML: Three
CML2: Four
CML: Three
CML2: There're four digits there – look!
CML: Three, tjommie
CML2: How come he can't count
T: Jonathan anyway, they're not straight hey, that one is going that way, that one is going that way (points on skeleton) – look at parts of it. The moment that you're bored with it, the moment you draw out of your mind, then you know you're doing something wrong

Percentages of interactions in which communications are opened by teachers vary from 37% to 73% between teachers. Although framing values span a narrow range (scores range from 2 to 3 rather than from 1 to 4), distinctions are thought to be meaningful given the apparently large effect of differences between open and closed dialogue, and the fact that in two of the three pairs of classes in the detailed study percentages of 'open' interactions differ by more than 25%.

F + + Discussion or potential for more than just one/two word learner responses is opened by the teacher in under a quarter of interactions
F + Discussion or potential for more than just one/two word learner responses is opened by the teacher in quarter to half of interactions
F - Discussion or potential for more than just one/two word learner responses is opened by the teacher in half to three quarters of interactions
F - - Discussion or potential for more than just one/two word learner responses is opened by the teacher in over three quarters of interactions

Pedagogic feature 6c: Regulative mode (Data sources: observation notes; transcripts of selected lessons from the observed project)

The concepts of "inter-personal" and "positional" control (Bernstein 1971), operationalised by Morais (1997) and drawn on to describe control of classroom entry and exit in pedagogic feature '6a' above, require careful examination for meaningful

description of regulative mode in art instruction-time. Brief mention of Morais and Neves' (1997) use of "inter-personal" and "positional" follow.

Framing of hierarchical rules is characterized as weak when the teacher does not indicate norms of social conduct previously established, leaving these implicit, and using personal appeals when students transgress the limits of the norms (Morais and Neves 1997). When using inter-personal appeals the teacher asks students for reasons for their conduct and shows them advantages and otherwise, of their attitudes (ibid). Framing of regulative control is categorized as strong when teachers address transgressions with positional or imperative communications (Morais 2002a), positional control being based on members' social status (Bernstein 1971).

Regulative communications in data in the current study present three features thought to have potential to shape pedagogy. First, neither explication nor the leaving implicit of norms is necessarily coupled with inter-personal or positional communications: the degree to which comments are inter-personal or positional seems to vary independently of the explication of norms. The two features need to be looked at separately in order to describe how they are combined by different teachers.

A second notable feature in the data is that positional communications issue from different 'voices', spoken from different social or status positions. One voice is that of 'secondary school teacher'. Comments like "Why're you all wandering around? Sit down now, the lesson has started" and "You people need to get a move on – you only have this lesson and two more", derive status from the school system.

Another perceived voice speaks from the position of one with an 'art eye', an eye 'schooled' in fine art. The status of comments like "you need to make more tones"; "work on your negative spaces"; "keep that whole idea of the formalist composition in mind – you must think in terms of balance and focal point" and "vary your brushmarks" is derived more from knowledge of art tradition than authority vested by the school.

A third consideration is that teachers give reasons for regulative suggestions, whether the comments are made in personalized or in positional or imperative modes.

A scheme for analyzing teachers' regulative comments has been devised, taking these features into account. The unit of analysis is the teacher-learner interaction, a single interaction being the sum of all teacher-learner communications (with individuals or groups) until the teacher moves to subsequent learners (see examples of interactions in the description of Pedagogic Feature 6b above).

Interactions have been scanned for presence and type of norms, learner transgressions, and teacher responses to learners' transgressions. Norms are categorized as 'implicit'; 'art-conduct norms' (such as "remember to think of your brush-marks as you're painting", "mix your colours", and norms for particular projects like "you must include bones"); and 'social-conduct norms' (such as "you're supposed to be sitting down and working" and "And we're supposed to be speaking English, not amaXhosa ... it's an English-medium school").

Learner transgressions comprise inferred or explicit breaches of norms, and constitute undesirable behaviours, social or art-conduct related. Transgressions can for example include having drawn incorrectly by not showing graded shading, inferred from a teachers' comment "that's very flat, work it a bit more", and holding a brush incorrectly, as meant in "don't hold your brush like that". Social transgressions such as learners chatting rather than working are usually more obvious, even when norms are implicit as in a teacher's comment "Hey!".

There is potential slippage between the concepts of regulative correction of art-conduct transgressions, and instructional explication of evaluation criteria. Regulative discourse refers to acquirers' "conduct, character, and manner" (Bernstein 1996: 27), but the distinction between social and work-specific conduct is not always clear. Conduct-related teacher comments such as "Don't mix the paint like that" for example could refer, amongst other things, to the consistency of the paint (an art-specific regulative comment), or for instance, a likelihood of the learner making a mess (regulative comment with a social emphasis).

Bernstein (1996: 29) defines the relationship between instructional and regulative discourse as one in which the instructional is embedded in the regulative. The

question arises as to the kind of regulative within which particular instructional discourses are embedded. In instances where regulative criteria are explicit such as in the comments "Don't add much water to that paint, it needs to be thick so that you can see the brushstrokes" (art-specific conduct emphasis) and "Don't mix your paint quickly like that, you're going to make a mess" (social conduct emphasis), *respective* reference to art instruction and social control is distinct. However with regulative comments in which criteria are implicit like "Don't mix the paint like that", reference is at once to art instruction *and* social control – the two spheres are indistinguishable. I discuss the relationship between implicit, explicitly art-specific and explicitly social-emphasis regulative comments on one hand, and the explication of evaluation criteria on the other, when describing elaboration of evaluation criteria below (see Pedagogic feature 10b).

I characterise regulative teacher responses to learner transgressions using the categories 'inter-personal/art-positional', 'social-positional/imperative' and 'mixed'. 'Inter-personal' communications are those referring to the personal attributes of individual learners and their artworks, comments given with reasons and personal consequences or requesting reasons for individual actions, and appeals. The following three extracts are examples of inter-personal communications showing how the teachers address transgressing learners *personally.* In the first excerpt two learners make a late collection of paint from a communal supply while the rest of the class is already working.

T: (to two learners taking an unusually long time to get paint) Are you guys still mixing paint?
CML: Sir you said we must go sit down so we went to sit down
T: Oh, there is a reason (said gently)

In a second example of an inter-personal teacher-correction of transgression, the teacher addresses a learner arriving more than 10 minutes after the start of the lesson.

T: (to a learner who has just walked into the classroom very late for the lesson) *Morning*, Mr. Noell
WML: Morning Sir (smiling)

In a third example showing personal addressing of a learner, the learner is not working apace with the class.

T: (to a learner who hadn't done much work for several lessons, was way behind the rest of the class, and had discussed different options for background imagery at length with the teacher on several previous occasions) Background?
BFL: I'm still thinking
T: Can I see the notes you've made on all the things you've thought about? What've you thought about so far?
BFL: Nothing because you're disturbing me
T: And what've you thought about so far?
BFL: Nothing!
T: Nothing, so you're thinking, and you're thinking about nothing ... I wish I could just clear my mind and see a wonderful universe where I didn't think (friendly tone)
BFL: The South African flag's stupid
T: I agree – unless it's really like whipped and twisted – and really interesting in terms of shape

Teacher communications are categorized as 'art positional' when instructions are given with reasons deriving from art-world or art-project norms, and 'social positional' when justification is based on school, age, or other general social norms. Comments are characterized as 'imperative' when made as commands with no justification. Some examples with characterizations in square brackets follow.

In the following transcript the teacher addressed a learner working with pencil deemed too hard.

T: You still need your 6B pencils – it's basically all coming out silver now
CML: (nods)
T: You still need to use your 6B to get your dark colours [*art norm, art positional comment*]

In the following excerpt a learner trying to complete a drawing after the teacher had called for all work to be submitted for marking, was addressed.

T: (to a learner after having said that work was due) Okay, what're you doing now Rick?
CML: (indistinct)
T: You give it in as it is. It's time now, if you don't come to school, that's your problem [*social norm, social-positional comment*]

The following comment was addressed to a learner socialising rather than working.

T: (to a learner not working after the start of a lesson) At the back there, can you please get some work done now? [*inter-personal comment*] Put your bag on the floor and get going [*norm implicit; imperative comment*]

Interactions often contain a mix of types of regulative comment. To simplify categorization, 'inter-personal' and 'art-positional' comments, often occurring together and both suggesting 'respectful' relations between teacher and learner, have been grouped, as have 'social-positional' and 'imperative' comments, these comments seen to suggest 'authoritarian' relations. When interactions include comments from inter-personal/art-positional and social-positional/imperative categories, communications are characterized as 'mixed'. If there are implicit as well as explicit norms, interactions are categorized according to the explicit norms, as containing 'art', 'social' or 'mixed' (art and social) norms. It is possible to place each interaction in the grid shown below, and identify the most frequently used categories for different teachers.

Table 16: Scheme to categorise teacher's regulative comments according to hierarchical character and use of norm

	No learner transgression	Social or art-related transgression with inter-personal/ art-positional teacher comment	Social or art-related transgression with social-positional/ imperative teacher comment	Social or art-related transgression with mixed-mode teacher comment
Norm/s implicit				
Art norm/s, with or without implicit norms				
Social norm/s, with or without implicit norms				
Mixed norms, with or without implicit norms				

Once the regulative comments of the six teachers in the sample selected for detailed study had been categorised using categories in Table 16 above, patterns were sought since axes along which teachers would vary were not known at the start of the

investigation. Comparison of categorised regulative features[27] shows that the teachers are similar in several ways, as shown below.

- For all teachers the most frequently-occurring type of interaction is that in which norms are implicit and there are no learner transgressions.

- This type of interaction (with implicit norms and no learner transgressions) is followed for all teachers, by interactions in which art-conduct norms are explicated and there are no learner transgressions.

- All but one teacher made more inter-personal/art-positional than social-positional/imperative or mixed-mode comments; with the remaining teacher this is reversed.

- Teachers differ with respect to percentages of interactions in which learner transgressions can be identified, and in teacher-responses to these transgressions. Categories of teacher responses to transgressions have been aggregated to simplify analysis. When all categories of explicated norms are combined and teacher responses looked at in terms of implicit versus explicit norms, percentages of responses do not differ widely between teachers. Norms are explicated in just under half to just under three quarters of interactions in all cases; accompanying comments are mostly inter-personal or art-positional save for a single case in which this was reversed.

- There is also little variation when teachers are compared with respect to 'harsh' comments – interactions featuring explication of social or mixed norms together with social-positional or imperative communications. There is less than 15% of such interaction for all but one teacher for whom just over a third of interactions include relatively authoritarian communications.

However when all categories considered 'respectful' rather than 'authoritarian', namely those with implicit norms, art-conduct norms, and inter-personal or art-

[27] For an example of categorization of Pedagogic feature 6c see Pedagogic feature 6c in analysis of the pedagogy of teachers 3A and 1A in Appendix 9.

positional teacher responses to transgressions are combined, there are differences between teachers. Framing of regulative mode is thus based on percentages of 'respectful' interactions with implicit/art conduct norms and inter-personal/art-positional teacher responses to learner transgressions, as shown below.

Regulative mode is essentially about the degree to which teachers adopt the role of 'teacher' and focus on personal or social conduct, social norms, and imperative communications, as opposed to taking on the role of 'art facilitator' and focussing on art-related conduct, art norms and inter-personal/art-positional communications. With strong framing of regulative mode, more teachers' comments address personal and social conduct with social-positional and imperative communications than address art-conduct. With weak framing of regulative mode, more teachers' comments address art-conduct with implicit, inter-personal or art-positional communications than address social conduct.

F + + Teachers emphasise personal and social conduct with social-positional and imperative communications; implicit or explicated art conduct norms together with inter-personal or art- positional teacher responses to learner transgressions feature in under a quarter of interactions

F + Teachers emphasise personal and social conduct with social-positional and imperative communications; implicit or explicated art conduct norms together with inter-personal or art- positional teacher responses to learner transgressions feature in quarter to half of interactions

F - Art-conduct is emphasised; implicit or explicated art conduct norms together with inter-personal or art- positional teacher responses to learner transgressions feature in half to three quarters of interactions

F - - Art-conduct is emphasised; implicit or explicated *art conduct* norms together with inter-personal or art- positional teacher responses to learner transgressions feature in over three quarters of interactions

Pedagogic feature 6d: Initiation of teacher-learner dialogue (Data source: transcripts of selected lessons from the observed project)

Framing values for initiation of teacher-learner dialogue are based on numbers of individual or group interactions initiated by teachers as opposed to learners in 90 minutes of the planning/doing phase of observed projects, as in the scheme below.

F + + Over three quarters of interactions initiated by the teacher
F + Half to three quarters of interactions initiated by the teacher
F - Quarter to half of interactions initiated by the teacher
F - - Less than a quarter of interactions initiated by the teacher

Pedagogic feature 6e: Control of learners' focus on work and social interaction unrelated to work, during practical lessons (Data sources: observation notes; transcripts of selected lessons from the observed project)

It has been observed that teachers differ in the degree to which they insist learners keep working: some allow social interaction as learners paint, draw or print while others forbid it; others permit periods of socializing without work.

Framing values for control of learners' work focus and social interaction have been derived from observation-based descriptions of the degree to which learners are focussed on work in 90 minutes of the 'planning/doing' phases of observed projects. Descriptions have been strengthened by addition of regulative 'episodes' taken from transcripts of the same 90-minutes of lesson time. These episodes constitute teachers' comments calling learners' attention to work, and learners' responses to these. The episodes are taken to illustrate control of work focus.

Learners were observed for example, settling down to work after a glance from the teacher, or comment like "Neil!". On the other hand they were seen to continue to interact socially after episodes such as the following, in which the teacher urged a learner to start working once the rest of the class had already settled to work

T: Where's the rest of your stuff – that you've done so far?
CFL: It's in my bag
T: Well take it out your bag! [gently, smiling]

Learners were seen focusing on work after episodes like the one below in which a teacher reprimanded a learner for being too slow to settle down to work at the start of a lesson.

T: At the back there, can you please get some work done now? Put your bag on the floor and get going

Framing values are based on the degree to which learners focus on work and followed teachers' directives in so doing.

F + + Most learners focus on work most of the time: the teacher does not permit non-task centred social interaction to alter this at all

F + Most learners focus on work most of the time: occasionally non-task centred social interaction gains precedence over work and when this becomes apparent, the teacher curtails it

F - Most learners focus on work some of the time: non-task centred social interaction often gains precedence over work and when this is extended in time or disrupts others, the teacher comments

F - - Learners choose to work or interact: the teacher allows this

Pedagogic feature 6f: Balance of sound levels (Data sources: observation notes)

Framing values for the balance of sound levels in the classroom have been categorized as it is thought that the audibility of teachers' ongoing evaluative commentary may have had significance for learners' knowledge of sought-after criteria. The balance of sound levels is a proxy for the level of teacher control, the level of which is assumed to be high when sound levels are low and low when sound levels are high.

Framing of sound has been categorized using estimations of volume levels during classroom observations, noted as 'very quiet to low', 'low to moderate', and 'moderate to high', whenever sound levels were perceived to change. These estimations were checked against sound levels noted in audio-recordings, in 90 minutes of the planning/doing phases of observed projects. Teacher comments were only audible across the room when sound levels were 'very quiet to low'.

Framing values are defined as follows:

F + + Collective sound from learner-learner interaction is low and the teacher's voice audible from anywhere in the classroom, over three quarters of the time (teacher control was assumed to be very high)

F + Collective sound from learner-learner interaction is low and the teacher's voice audible from anywhere in the classroom, half to three quarters of the time (teacher control was assumed to be high)

F - Collective sound from learner-learner interaction is low and the teacher's voice audible from anywhere in the classroom, quarter to half of the time (teacher control was assumed to be low)

F - - Collective sound from learner-learner interaction is low and the teacher's voice audible from anywhere in the classroom, under a quarter of the time (teacher control was assumed to be very low)

5.2.2.2. Instructional discourse/discursive rules

In research exploring features associated with achievement in science (Morais 2002a), the selection, sequencing, and pacing of knowledge, and explication of criteria, is based on units of fact- and theory-based content. In art, since content is loosely specified in the syllabus (see Chapter 1, Section 1.3), I have developed new categories from data gathered, the categories being framed by Bernstein's (1990; 1996; 2000b) constructs.

Pedagogic feature 7a: Macro-level framing of selection: selection of whole projects/sets of processes (Data source: teacher interviews; observation of learners' final-year exhibitions)

There is a general scarcity of documentation of work covered in art lessons and teachers were asked in interviews, for verbal descriptions (as well as for any written outlines they had), for all projects done by learners in their final two years of secondary school. They responded to the following questions:

(a) Can you tell me briefly about the project, what it was about, what learners had to do?

(b) Can you describe how you introduced the project, what you said to learners, what you showed them, what happened in the introduction?

(c) What are all the things learners could select in this project?

(d) What criteria did you use when you evaluated the project?

Considerable time had lapsed between the recounted events and interviews, and it has not always been possible to reconstruct complete sets of information relating to the questions. Teachers' responses and documentation provided have been analysed in terms of opportunities for learner selection of whole projects. Where learners could select several features (such as technique, composition, colour, style, format, imagery or subject matter) and where the teacher specified any one or more of these, whole projects are said to be teacher-selected. Where learners selected projects without teacher specification, or selected from a range teacher-specified options, whole projects are deemed learner-selected.

Framing values for macro-selection of projects are based chiefly on numbers of teacher-specified projects in learners' final two years of secondary school, with

numbers of projects recognizable across observed final exhibitions within classes as back-up evidence.

F + + Over three quarters of projects selected by the teacher
F + Between half and three quarters of projects selected by the teacher
F - Between quarter and half of projects selected by the teacher
F - - Fewer than a quarter of projects selected by the teacher

Pedagogic feature 7b: Micro-level framing of selection: selection of aspects within projects/sets of processes (Data source: teacher interviews)

Verbal descriptions of opportunities for learner selection in the two final years of secondary school, outlined in teacher interviews and on project handouts, have been analysed to assign framing values to within-project selection. Within-project selection involves learner choice of features such as physical viewing position, formal elements (line, colour, texture, shape, etc), composition, format, size, technique, media, theme, subject matter, imagery, style, and form. It is said to be narrow when confined to either only technical areas (viewing position, formal elements, composition, format, size, technique and media) or only subject matter (content, concept, theme or topic). Within-project selection is said to be wide when learners can make choices within both technical and thematic areas. It should be noted that far from being unlimited, 'wide' selection of subject matter almost always involves broad teacher specification of topics like "journey", "monument", or "myself as ...", within which learners can make finer selections. Framing values are assigned as follows:

F + + learner selection narrow in three quarters or more of instances
F + learner selection narrow in half to three quarters of instances
F - learner selection narrow in quarter to half of instances
F - - learner selection narrow in under a quarter of instances

Pedagogic feature 7c: Micro-level framing of selection: Selection of sources of reference when planning/creating an artwork (Data source: teacher interviews)

Provision of sources of reference such as imagery or physical transportation of learners to sites of reference by the teacher, as described in teacher interviews and/or noted in classroom observations, are used to assign framing values to selection of reference material. Framing values are based on the percentage of projects in the final

two years of secondary school where the teacher provides reference material, as follows:

F + + teacher provides sources of reference in over three quarters of instances
F + teacher provides sources of reference in half to three quarters of instances
F - teacher provides sources of reference in quarter to half of instances
F - - teacher provides sources of reference in fewer than a quarter of instances

Pedagogic feature 8a: Macro-level framing of sequencing: Sequencing across projects/sets of processes (Data source: teacher interviews)

In the process of observing lessons and interviewing teachers, two types of progression in terms of increasing levels of difficulty in processes have been noted. The first is progressive increase in the number of features learners are required to inter-relate. The second is an increase in the degree to which artworks are required to engage with abstract ideas. Progression here is from minimal engagement with abstract ideas (such as when copying from life or existing imagery is required), to a requirement of metaphorical projection (such as when interpreting themes like "journey", "taste", "monument", figuratively is required).

The assigning of framing values to macro sequencing across projects is based on the presence of either of the above types of progression across projects done in the three final years of secondary school and related by the teacher, as follows:

F + + teacher provides sequence of projects, from those requiring inter-relation of few features/minimal engagement with abstract ideas, to those relating many features/engaging with ideas;
F + teacher generally sequences projects, with most requiring inter-relation of few features/minimal engagement with abstract ideas at the start, and most relating many features/engaging with ideas towards the end of secondary school, taking learners' perceived needs into account;
F - perceived learners' needs determine teacher sequencing of projects with respect to requirements for the inter-relation of features/engagement with abstract ideas;
F - - learners choose from a range of projects differing with respect to numbers of features included/level of engagement with abstract ideas, in each instance

Pedagogic feature 8b: Micro-level framing of sequencing: sequencing of components within projects/sets of processes (Data sources: observation notes and transcriptions of selected lessons in the observed project)

Teacher sequencing of stages within projects and enforcing adherence to this sequence, as well as proportions of learners following set sequences are considered in the assignment of framing values to sequencing within projects.

Presence of teacher comments and actions in relation to sequencing of components has been sought in transcripts of all phases of observed projects. A teacher 'comment' is defined as a communication around sequencing, made to individuals or groups, whether brief or spanning several teacher-learner 'turns'. Comments are categorized as 'outlining' or 'enforcing', according to function. Use of non-verbal enforcing strategies including continually observing/commenting on learners' work, quick pace, and regulated supply of materials, and the degree to which learners' follow 'outlining' or 'enforcing' comments/strategies is obtained from fieldnotes matched with transcripts.

The following is an example of a comment 'outlining' a sequence of processes:

> "... I'm just gonna do an introduction to a painting project. We're only gonna do drawing and planning today. Then I ... probably would be returning that [still life with skeleton] ... and we're gonna work on a painting from the drawings ...', and, '... You're gonna fill that A3 page with line firstly, and then with tone ..."

In the following extract the teacher 'enforces' adherence to a sequence of processes when a learner expresses a desire to change the sequence.

L: Sir can I do it over again in pencil first?
T: Ja you can ... but not now. Now we're gonna do painting. You can do it at a later stage.

The following excerpt shows teacher-enforcing of sequence when a learner has not adhered to a recommended sequence.

T: I would get my composition more pulled together before starting with tones there

Framing values are assigned as follows:

F + + sequence outlining and enforcing comments present in all project phases, with all/most learners following the set sequence
F + sequence outlining and enforcing comments present in most project phases, with all/most learners following the set sequence
F - sequence outlining comments present but not enforced, with some learners following the set sequence and others a sequence of their own making
F - - sequence outlining comments not usually present

Pedagogic feature 9a: Macro-level framing of pacing: pacing of quantity of work done (Data sources: observation notes; transcripts of selected lessons from the observed project)

Framing of pacing is categorized chiefly through consideration of the number and sizes of artworks in learners' final exhibitions. The degree to which learners were required to adhere to set deadlines, as seen in teacher strategies for concluding projects, is also considered.

In all observed cases twelve to fourteen projects were done over the two final years of secondary school. These projects yielded, on average, ten artworks deemed sufficiently strong for display in final exhibitions. Finished artworks varied in size from pieces smaller than A4 (foolscap size) to those larger than A0 (more than 84 x 118cm). For the purposes of this analysis works smaller than A3 are described as 'small'; those between A3 and A1 as 'average'; and those A0-sized and over, as 'large'.

Quantities of work in exhibitions are described as 'large' when there are more than ten artworks, or when the ten artworks are large; 'moderate' when there are ten artworks of average size; and 'small' when there are fewer than ten artworks and when artworks are small. The volume of learners' work is taken as a proxy and to reflect that set and brought to conclusion by the teacher: it is presumed that production of a large volume of work is an indication of strong teacher-led pacing. Framing values are assigned as follows:

F + + Over ten artworks or ten large artworks in exhibitions; very strong teacher-driven pacing
F + Ten or more artworks of average to large size in exhibitions; strong teacher-driven pacing
F - Ten or fewer artworks of small to average size in exhibitions; weak pacing
F - - Fewer than ten artworks of small size in exhibitions; very weak pacing

Pedagogic feature 9b: Micro-level framing of pacing: pacing within projects (Data source: transcripts of selected lessons from the observed project; observation notes)

Pacing values for within-project pacing are assigned on the basis of the degree to which learner pacing is individualized or communalized. Values are based chiefly on the presence of teacher strategies aimed at keeping the whole class working together in observed projects or parts thereof, and observations of the degrees to which learners kept apace or otherwise.

Whole-class time frames and whether or not learners kept to these were noted in all phases of observed projects. Whole-class time frames include features such as whole-class explanations, question-answer sessions, visual demonstrations, and discussion, addressed to the whole class in the midst of series of individual teacher-learner interactions. Framing values are assigned as follows:

F + + teacher strategies keep the whole class working together all/almost all of the time; there are few or no project stages with learners working at individual paces
F + teacher strategies keep the whole class working together most of the time; learners work at individual paces some of the time
F - learners work at individual paces most of the time; teacher strategies keep the whole class working together some of the time
F - - learners work at individual paces all/almost all of the time; there are no or few phases in which teacher strategies keep the class working apace

Pedagogic feature 10a: Framing of evaluation criteria: extension of learner-selected features (Data source: transcripts of selected lessons from the observed project)

Framing of evaluation criteria is considered in project introductions, project phases in which teachers evaluate artworks-in-the-making, and criticisms of completed work. Criteria are rendered visible to different degrees, in teachers' extensions of learners' selections (see Pedagogic feature 10a), and elaboration of procedures and principles

(see Pedagogic feature 10b). Teacher extension of learners' selections is distinguished from teacher elaboration of criteria since extensions are made on the basis of artwork or ideas originating with or in relation to individual learners, while elaborations relate to context independent fine art criteria. Elaboration of criteria effectively situates learners' work within tradition, while extension of learner selections serves to specialise learners' individuality. While criteria with roots in fine art tradition are specialised 'in advance' of learners' making of artworks, learners' selections serve to further specialise the criteria for evaluation of their productions.

In every project learners make selections with respect to one or more features related to the making of an artwork. Teachers' responses to these selections have been categorized in four ways. First, the teacher can 'affirm' learners' selections, as for example, when a learner has chosen to work with powder paints, with "it's so much easier to work with powder paints", or with "that's nice". Second, the teacher can 'clarify' selections such as in the following excerpt where a learner approaches the teacher, asking if he can paint a composition he has sketched.

CML: Sir can I do this one here?
T: But are you happy with that composition? Is that finished?
CML: No – I was going to do more stuff in there (points on artwork)

Third, a teacher can 'extend ' learners' selections by encouraging them to do more of something they have already begun, as in: "You're doing fine – just bring in some different tones ... just like you've done here (points to area on learner's drawing)".

Fourth, the teacher can 'extend' learners' selections by adding new ideas, as can be seen in the following excerpt where the learner shows the teacher an artwork featuring a self-portrait surrounded by cut-out sketches of butterflies in various stages of maturity as symbols of growth.

T: ...There're things like ... developing things spatially and also in some sort of time sequence ... You've got to think if you're going to suspend those [points to sketches of butterflies] or mount them. Or ... stick them down ... I mean you can think of some sort of metamorphosis. Like this [points to nose and cheeks on drawn self portrait] becoming the body of the butterfly – your nose – and from there, you know, wings extending outwards ... And then the environment – are you a person that likes nature? Are you a person that doesn't like nature? ... Butterfly nymphs – we find

> them in beautiful places where nature abounds – you could do a contrast in your drawing of city and barren spaces, and very lush areas. And you could possibly think of ... bringing ... something transparent over it ... These eyes [points to eyes in drawn self-portrait] can become the eyes on the butterfly's wings ... So I think what you need to do is you need to look at the complete form of a butterfly and you need to think of how you can relate it to that [points to drawn face] ... even if you start working on transparent paper ... where you cut out things and reveal parts of yourself [the drawn face] ...

Teacher responses to learner selections have been counted and characterised in 90 minutes of the planning/doing phases of projects. Framing values for extension of learners' selections are based on the percentage of individual teacher-learner interactions featuring one or more new idea extensions made by the teacher, as follows:

F + + learner selections extended by the teacher in over three quarters of interactions
F + learner selections extended by the teacher in half to three quarters of interactions
F - learner selections extended by the teacher in quarter to half of interactions
F - - learner selections extended by the teacher in under a quarter of interactions

Pedagogic feature 10b: Framing of evaluation criteria: elaboration of criteria in teacher judgements (Data source: transcripts of selected lessons from the observed project)

Elaboration of criteria in teacher judgements in individual, small group or whole-class teacher-learner interactions in project introductions, 90 minutes of the planning/doing stages of observed projects, and samples of criticism sessions is analysed. Criteria are rendered distinct through change in content or individuals with whom criteria are being discussed. Since the idea is to show degrees of elaboration of criteria, a continuum of clarity is needed.

Criteria are said to be 'clear' when presented as specific routes of progression or articulations of ideas relating to subject matter content by the teacher. The critical feature for defining clarity is the narrowness of options presented to learners: in clear evaluations the teacher presents relatively specific options within which learners are bounded and isolated from possibilities external to this. Criteria are said to be 'unclear' when several options are available to learners, and when ideas about subject matter content are not verbally elaborated. When criteria are unclear, learners can potentially make multiple interpretations.

I argue that various conditions narrow the possibilities of interpretation by learners and serve to clarify criteria, four of which have been found in the data and are delineated below.

- Criteria are made clearest when specific principles or features to be evaluated *and* art-specific behaviours are explained to learners *together with* the showing of visual examples *in the form required.* Specific features comprise specific art principles such as for example, the manipulation of pictorial space with line in the following excerpt. Art-specific conduct refers to *regulative* comments in which clear directions for art-related conduct are given (see Pedagogic feature 6c above) such as "broken shapes, broken lines ... play with that" in the excerpt below. I assert that when regulative comments are explicit and refer to art-specific conduct, they appear to provide the means to realise principles of art. Specific features to be evaluated, art-specific conduct and visual examples are indicated in square brackets in the following extract.

T: ... what's wrong with this [sketch on blackboard showing overlapping outlines of objects]?
CML: You can see the objects
CML2: It's overlapping
T: ... What's in front there? ... Is anyone gonna argue with me ... the bone's in front, isn't it?
CFL: Yes
CML3: Ja
T: And the chair shape's behind ....Why does the mind tell you that?
CFL2: Because the bone's on top of the chair
T: How d'you know it's on top – it's not, it's chalk on board ...
WML: It's overlapping
T: ... It overlaps ... Whenever it overlaps it's obvious: this thing's in front of that thing ... Your mind tells you because of overlapping ... You must confuse the viewer – [as to] what's in front and what's not [*specific art-conduct*]. If you do this [alters sketch on board, removing lines that provide the illusion that one object is in front of the other] [*visual example in the form required*] you have no idea, you wouldn't know ... what's in front, what's behind. Broken shapes, broken lines ... Play with that ... [*specific art-conduct*]

- In the above example the use of comments categorised as *specific art*-conduct (see Pedagogic feature 6c) together with visual examples in the form required give

learners the means and a model to realise criteria. If teachers and learners *share* visual models, a second way in which criteria are made explicit is through teachers' mention of specific principles or features to be evaluated *or* specific art-conduct, *without* visual examples, as in the following extract.

T: You've got a very dominant strong shape in the middle – you placed it ... dead centre and you placed it very stably. Now probably your rest of your design you'll have to use that kind of thing [*principle of unity articulated*]. If you're gonna have a line cutting through it like that, it's gonna disturb your whole composition [*another aspect of the principle of unity articulated*] ... Now what I would advise you is, look at shapes like that [that are] very dominant. That you'll have to repeat somewhere outside – so you'll have to refer this – otherwise it's gonna be too much of a dartboard type of thing ... where you've got this bulls-eye in the middle [*specific art-conduct; shared visual image of dartboard*]

CFL: Can we do ... like everywhere pieces?

T: Ja, but what I'm saying is – this thing is very strong as it is here. If you wanna bring in ... [diagonal] lines ... mainly from the side, try'n overlap it and hide some of these – don't let this thing be too strong [*specific art-conduct articulated*]

CFL: Okay

T: ... I'm just saying keep it in mind when you work with your composition [*general art-conduct articulated*]

- A third way in which criteria are clearly articulated is when approval is qualified, such as in "interesting mark-making', "lovely colours", or the following excerpt in which the teacher refers to drawings in the making of which learners looked at a model and drew themselves respectively.

T: ... I actually think that the drawings you were doing for blind contour were much better than the drawings you did about yourself crouching, because you were very self-conscious when you did yourself crouching ...

- Lastly, a requirement for conceptual content is made clear when ideas are discussed verbally, as in the following excerpt in which learners were required to make visual commentary on a public sculpture of their choice.

CFL: I found something [subject matter content] ... It's that lady on top of the fountain ... The catholic lady – I think she's catholic, I don't know ...

CFL2: She's standing on top of the fountain that was erected by Howard something – dedicated to something. She's serene and like very calm and stuff

CFL: So I was thinking that, with like a very destructive and grotesque background

T: The background being here in the Gardens

CFL3: I don't know where you get destructive and grotesque in the gardens

T: No no no – you could do her in front of the school and you could let the school degenerate into this graffiti-spoilt gang-ridden –

I argue that criteria remain unclear and open to interpretation by learners when teacher judgments are tacit as in ways explained below.

- Unqualified or partially qualified approval leaves criteria open to interpretation. Examples of unqualified approval include "that's nice" and the following excerpt in which a teacher comments in passing, on a partly-completed painting.

T: This kind of thing [referring to the learner's image] is working wonderfully already – I mean it's got that bit extra that people have when they go into the 80's [80%] – where it's creative and where it works ... It's also got something original ..."

- Criteria remain unclear secondly, when principles or features to be evaluated and desired art-related conduct are phrased in a generalised or implicit way (see Pedagogic feature 6c) and given without visual exemplification. Generalised conduct-related comments such as "play around with shading and texture" and "get the image to balance", for example, can be interpreted in a number of ways. Clearly, art-specific regulative comments are not necessarily sufficient to elaborate criteria. In a final example, a judgment refers to conduct in a generalised way, leaving unclear the fact that proportion is the principle being evaluated:

T: ... you're just drawing without [looking at the object] ... The moment you draw out of your mind then you know you're doing something wrong ...

- A third type of judgment in which criteria remain unclear features specifically phrased art principles without specific recommendations for conduct or visual example, especially when visual conceptions if ideas are not shared by the teacher and learners. In the following instance for example, appropriate ways of following the given principle of reworking unsuccessful areas within paintings are not evident: "Do you know what's wonderful about painting ... if it's a mess, you cover it again ...". In another example the teacher discusses the principle of spatial manipulation, attempting to construct a common visual understanding

which did not emerge as learners could not recall the images of which the teacher spoke.

> T: ... [The] relation to depth in Cubism ... [There isn't really] a visible difference between foreground and background ... it seems as if it's treated very flatly but you get a very strong sense of volume ... because of shading – contrast between light and dark, it looks as if it's got volume. But you don't really know what's in front of what [*specific principle articulated*]. People d'you recall this – I showed you these slides

- Lastly, judgments in which teachers show visual examples without clarifying specific features to be evaluated or conduct to be followed, leave criteria unclear.

Framing values for elaboration of evaluation criteria are based on percentage counts of teacher-learner interactions containing one or more clear teacher judgements.

F + + learners given clear judgements in over three quarters of interactions
F + learners given clear judgements in half to three quarters of interactions
F - learners given clear judgements in quarter to half of interactions
F - - learners given clear judgements in under a quarter of interactions

5.2.3. Instructional content/level of conceptual demand

An additional classificatory feature, instructional content, thought to have potential to affect learners' achievement, has not been conceived in terms of classification or framing. It has been said above that instructional content in the art syllabus in use for the duration of the current research (Western Cape Education Department 1995) is loosely specified as six processes. Teachers in the study do not refer to this syllabus as they do not need to. The processes, although simply expressed, constitute the basis of fine art training.

Art teachers in the study work individually, designing projects in which processes described in the syllabus are undertaken. Projects can be grouped into three categories. The simplest comprise technical exercises, focussing on art elements such as line, colour, texture, or tone; working in particular styles, and exercising principles such as proportion. Other projects are more complex, requiring orchestration of *several* elements into resolved *compositions*. The most complex type of project requires conceptual, interpretive, metaphorical content – engagement with ideas – as

well as technical skill. The level of conceptual demand and potential for originality increases with the progressive complexity of projects.

Projects set by individual teachers have been given complexity rankings of 1, 2, or 3, depending on whether they are technical exercises, exercises in composition, or exercises involving metaphor. Instructional content in classes given by teachers in the sample selected for detailed study and recounted in teacher interviews has been ranked, counted, and coded with one of four values as follows.

++ Complex projects (projects with high levels of conceptual demand) in three quarters or more of the projects recounted from the two final years of secondary school

\+ Complex projects (projects with high levels of conceptual demand) in half to three quarters of the projects recounted from the two final years of secondary school

\- Complex projects (projects with high levels of conceptual demand) in quarter to half of the projects recounted from the two final years of secondary school

-- Complex projects (projects with high levels of conceptual demand) in under a quarter of the projects recounted from the two final years of secondary school

5.3. Chapter summary

In this chapter principles and procedures for coding data on pedagogy from transcripts of observed lessons; observation notes; teacher interviews, and responses to learner questionnaires are delineated. Pedagogy is described in terms of 27 pedagogic features, each barring one in terms of classification of discourses, space, and agents, and framing of instructional and regulative discourse (see categories in Table 17 below). One pedagogic feature, that of instructional content or the level of conceptual demand in projects set by teachers, is not seen in terms of power and control relations and is described as 'additional'.

Pedagogy in each of the six school classes in the sample selected for detailed study has been coded for the 27 pedagogic features described above (see examples of coded pedagogy in Appendix 9). Relationships between these pedagogic features and high achievement by learners in specific social class groups are explored in the next chapter.

Table 17: Categories used for analysis of pedagogy

POWER RELATIONS
CLASSIFICATION OF DISCOURSES Classification between 'consecrated' and 'unconsecrated' art discourses 1a. classroom displays 1b. stored visuals 1c. references to consecrated art 1d. gallery exposure 1e. art history Classification between styles or 'languages' within 'consecrated' art 2. art 'languages'
CLASSIFICATION OF SPACE 3a. teacher-learner space 3b. length of individual teacher-learner interactions 4a. learner-learner space 4b. learner-learner materials
CLASSIFICATION OF AGENTS 5. differentiation between learners
CONTROL RELATIONS
FRAMING OF REGULATIVE DISCOURSE 6a. entry to/exit from the classroom 6b. control of communication 6c. regulative mode 6d. initiation of teacher-learner dialogue 6e. control of work focus 6f. balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE 7a. macro selection (of projects/processes to be carried out) 7b. micro selection (of components within projects/processes) 7c. micro selection (of sources of reference) 8a. macro sequencing (of projects/processes to be carried out) 8b. micro sequencing (of projects/processes to be carried out) 9a. macro pacing (of projects/processes to be carried out) 9b. micro pacing (of projects/processes to be carried out) 10a. explication of evaluation criteria via extension of learner selection 10b .explication of evaluation criteria via elaboration of criteria
ADDITIONAL CLASSIFICATORY FEATURE 11. level of instructional content

CHAPTER 6

SOCIAL CLASS, PEDAGOGY, AND ACHIEVEMENT IN ART: ANALYSIS OF RELATIONS

This chapter presents a series of analyses. The main analysis explores, in four phases, relations between pedagogic features and high final-exhibition grades by learners differing with respect to their social positions. This exploration is preceded by an analysis of the comparability of all school classes in the sample studied in detail. It is followed by an investigation of pedagogic features associated with learners' recognition of high quality in drawings. The chapter closes with development of a pedagogic model associated with achievement in art, and comparison of features in this model with pedagogic features linked to high achievement in science found in earlier research (Morais et al 1997; Morais and Pires 2002).

6.1. Ascertaining the suitability of school classes for comparison

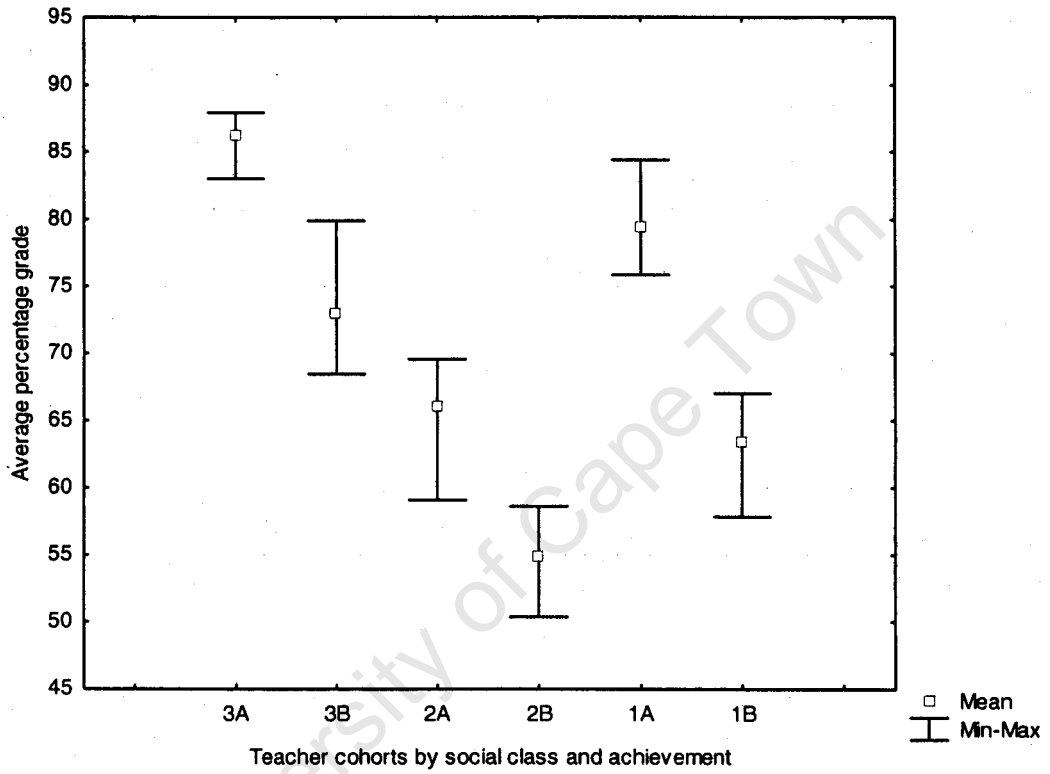
To explore the association of specific pedagogic features with achievement of high final-exhibition grades by learners differing with respect to social class, it was necessary to carry out a detailed analysis of the suitability for comparison, of classes studied. Since teachers were selected on the basis of patterns in their learners' social class and percentage grades identified in 1999[28], analysis was required to ascertain whether patterns within and between school classes remained constant over the remaining three years of the research. This was essentially a test of the stability of teacher effects. School classes have been compared using Kruskal Wallis tests to ascertain whether learners' average percentage grades and the spread of grades were similar within, and different between, teachers over the four years of the research, data each year having been gathered using the distinct final-year cohorts of learners.

A test to ascertain whether the six school classes differed with respect to learners' average percentage grades and the spread of grades, shows that there were consistent clear differences in the same direction between the six groups over the four years of

[28] The six classes in the study comprised two at each of three social class levels, one in each pair achieving at higher levels than the other.

the study. The consistency of these patterns points to the stability of teacher effects. Figure 4 (below) shows a mean plot of average grades and the spread of grades, using *all* grades awarded in the four years of the research, for classes of the six teachers selected for detailed study.

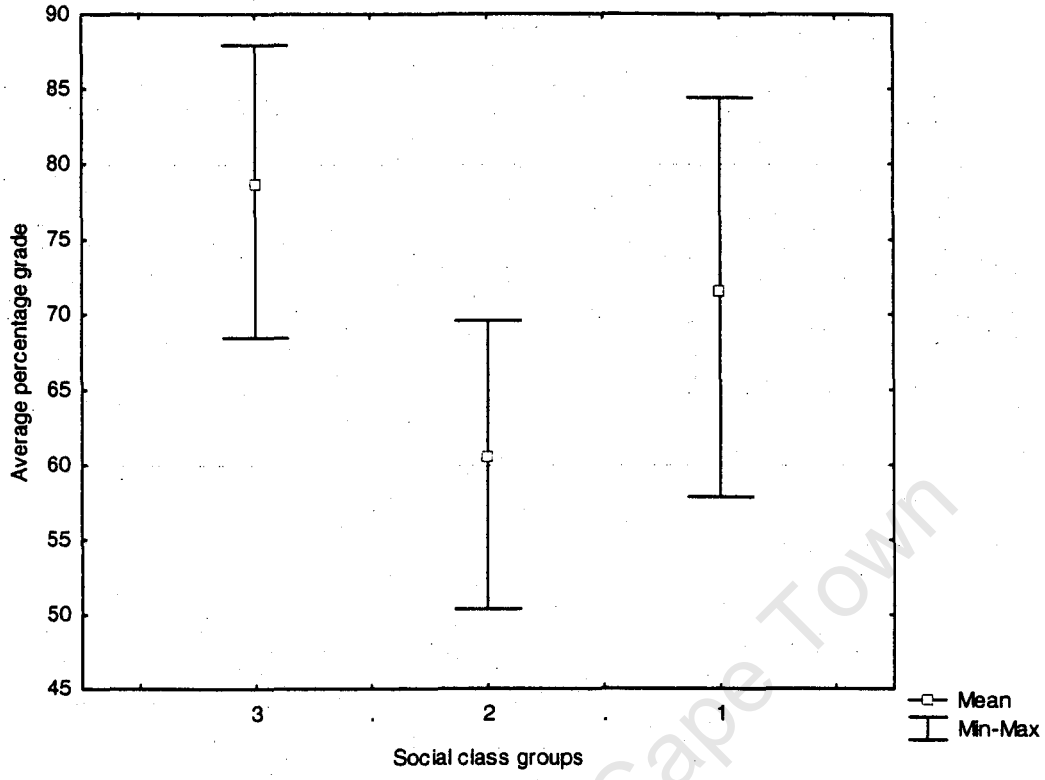
Figure 4: Mean plot for average grades for the classes of each teacher



Key:
'3A' = school class of learners with high social class, high-achieving
'3B' = school class of learners with high social class, low-achieving
'2A' = school class of learners with medium social class, high-achieving
'2B' = school class of learners with medium social class, low-achieving
'1A' = school class of learners with low social class, high-achieving
'1B' = school class of learners with low social class, low-achieving

A similar test to explore whether identified differences in learners' average grades and the spread of grades between 'high', 'medium' and 'low' social-class groups persisted after the year in which they were selected, shows that there were consistent clear differences in the same direction between the three groups in three subsequent years: the three achievement levels were consistently maintained. Figure 5 (below) shows a mean plot of average grades and the spread of grades, using *all* those awarded in the four years of the study, for school classes of learners in particular social class groups.

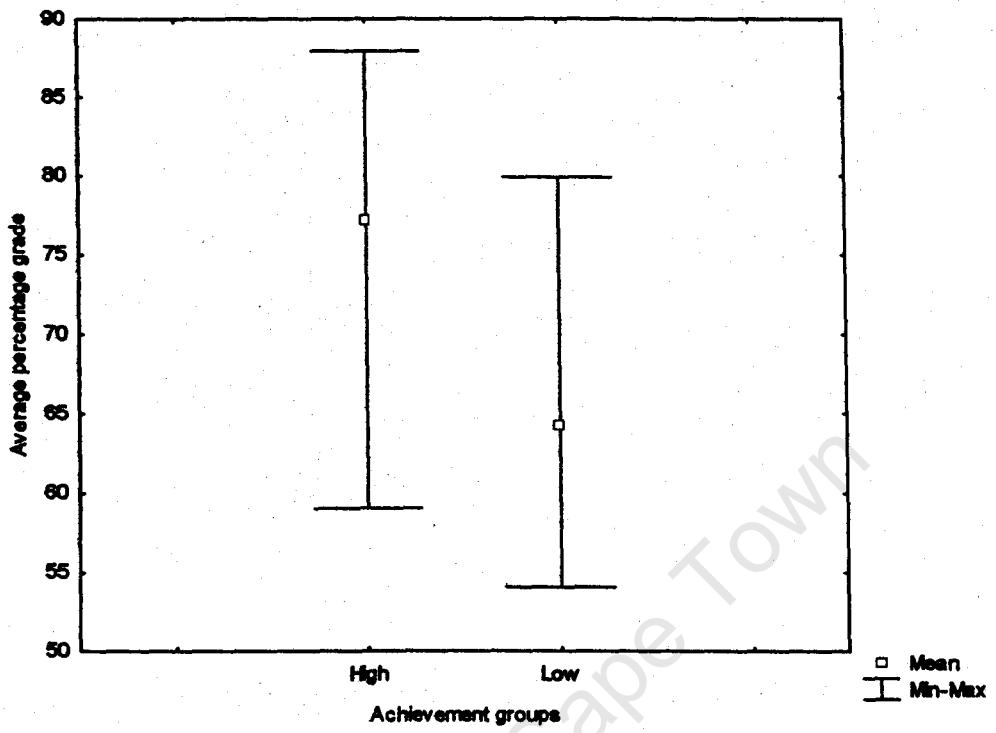
Figure 5: Mean plot for average grades of learners in 'high', 'medium' and 'low' social class positions



Key:
Group 1 = two school classes of learners with 'low social class'
Group 2 = two school classes of learners with 'medium social class'
Group 3 = two school classes of learners with 'high social class'

A third test, to ascertain whether initial-year patterns in learners' average grades and the spread of grades in each of the 'high' and 'low' achievement groups remained consistent over the four years of the study, has been carried out. Analysis shows that the two levels were consistently maintained: those designated 'high' or 'low-achieving' at the start of the study were enduringly so. Figure 6 (below) shows a mean plot of average grades and the spread of grades, using *all* of those awarded in the four years of the study, for school classes of learners achieving at levels designated as 'high' and 'low'.

Figure 6: Mean plot for average grades of 'high' and 'low' achieving groups



Key:
High = three school classes of learners achieving at high levels
Low = three school classes of learners achieving at low levels

Since patterns in learners' average grades and the spread of grades identified in the first year of the study were consistently maintained over three subsequent years for the social class groups, the classes of the six teachers selected for detailed study, and the high and low achievement groups, it was possible to consider exploring whatever it was that was enduring.

If social class was the feature preserving the contrast between and similarities within school classes, it would be expected that achievement grades would run in accordance with privilege. This concurrence was not observed (see Figure 5), opening two possibilities. Either the relationship between social class and achievement was invalid, or an additional feature, such as pedagogic practice, was intervening to preserve identified achievement patterns across the years. Since it has been shown that learners' art grades were patterned along social class lines when the initial sample of 14 classes was analysed (see Section 3.6.2.3 in Chapter 3), the significance of pedagogy is suggested. If pedagogies associated with high-achieving 'low and high

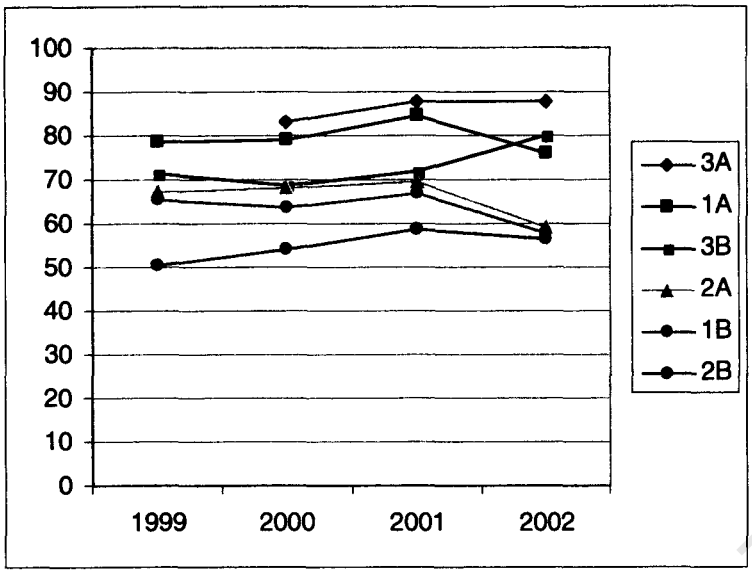
social class' learners are found to be similar to each other and different from those experienced by lower-achieving school classes, then a feature or features consistently associated with achievement patterns will have been identified. For this investigation it was important to examine the achievements of classes of each teacher in the sample in relation to all others in the sample, regardless of social class.

6.2. School classes ranked

The ranking of classes of the six teachers according to the average grades and spread of grades of the classes been shown graphically and in table form (see Figure 7 and Table 18 below). Figure 7 (below) plots annual average grades of learners of the six teachers, showing patterns within and between classes of the teachers over the four years of the study. In Table 18 (below), teachers are ranked in descending order with respect to the average grades and spread of grades of learners in their classes. It can be observed that ranking patterns between the classes of selected teachers were maintained in the first three years of the study, with classes of 1A and 3B changing positions with a respective drop and increase in average grades, in the fourth year[29]. Ranking patterns are however considered sufficiently consistent to warrant investigation of pedagogic features as intervening variables associated with achievement.

[29] Possible reasons for ranking changes (see change in ranking of the classes of 1A and 3B in 2002) are not clear. There was neither obvious pedagogic change within school classes nor could possible hidden change be explored, as practise had been observed and recorded in detail once only. Teachers whose classes were awarded increased or decreased average grades respectively, spontaneously commented during the course of the year in question and prior to the final grading, on the presence an unusually high degree of 'talent' in the case of the class with increased grades (class of teacher 3B), and the weakness of the learners in the case of the class with decreased grades (class of teacher 1A).

Figure 7: Average percentage grades for the six school classes in the study over four years



Key:
3A = school class of learners with high social class
3B = school class of learners with high social class
2A = school class of learners with medium social class
2B = school class of learners with medium social class
1A = school class of learners with low social class
1B = school class of learners with low social class

Table 18: Ranking of the six school classes in the study, from highest to lowest on the basis of average grades of learners within them, over four years

1999	2000	2001	2002
-	3A	3A	3A
1A	1A	1A	3B
3B	3B	3B	1A
2A	2A	2A	2A
1B	1B	1B	1B
2B	2B	2B	2B

Key:
3A = school class of learners with high social class, high-achieving
3B = school class of learners with high social class, low-achieving
2A = school class of learners with medium social class, high-achieving
2B = school class of learners with medium social class, low-achieving
1A = school class of learners with low social class, high-achieving
1B = school class of learners with low social class, low-achieving

6.3. Analysis of relations between pedagogic features, percentage grades, and learners' social class positions

Pedagogies in the three pairs of school classes selected for detailed study are used for the analysis of relations between pedagogic features, high percentage grades, and learners with particular social class categorisations. The six school classes are

compared in four ways as described below (see Table 19 for a diagrammatic representation of the four comparisons).

- In the first phase of analysis pedagogies of the three high-achieving classes are compared with pedagogies in the three low-achieving classes, to ascertain whether specific pedagogic features are associated with high percentage grades for learners across the different social class groups. This part of the analysis is useful for showing pedagogic features likely to be associated with high percentage grades and features possibly linked to high grades for learners across all social class groups, as well as features linked to all art teaching in general (see Section 6.3.1).

- Second, pedagogies of the three social class groups are compared to see if any pedagogic features are patterned with respect to social class. This part of the analysis is useful for identifying pedagogic features varying with social class and not achievement (See Section 6.3.2).

- Third, pedagogies within high and low-achieving groups are respectively examined for social class patterns, to investigate pedagogic features associated with high percentage grades for different social class groups. This part of the analysis, corroborated by the two earlier phases of analysis, makes possible the grouping of pedagogic features into four categories on the basis of pedagogic-feature variation-patterns within and between achievement groups. The groupings are first, features associated with high grades for all learners; second, features associated with achievement for learners in particular social class positions; third, features associated with social class but not achievement; and fourth, features associated with neither social class nor achievement (see Section 6.3.3)

- The two-pronged fourth part of the analysis explores similarities and differences between high and low-achieving school classes in each of the 'high', 'middle' and 'low' social class pairs, and compares the two top-achieving schools, each being at opposite ends of the social class spectrum.

This part of the analysis is useful for identifying pedagogic features associated, but less strongly so than others already identified, with high percentage grades for learners across different social class groups (see Section 6.3.4).

Table 19: School classes compared for analysis of associations of pedagogic features with high percentage grades in art by learners in specific social positions

First phase of analysis

HIGH-ACHIEVING SCHOOL CLASSES (pedagogic similarities within 3A-2A-1A as a group, and differences between the two groups, 3A-2A-1A and 3B-2B-1B)	LOW-ACHIEVING SCHOOL CLASSES (pedagogic similarities within 3B-2B-1B as a group, and differences between the two groups, 3B-2B-1B and 3A-2A-1A)

Second phase of analysis

SCHOOL CLASSES OF LEARNERS WITH HIGH SOCIAL CLASS (pedagogic similarities within 3A-3B as a group, and differences between 3A-3B and other social class groups)	SCHOOL CLASSES OF LEARNERS WITH MEDIUM SOCIAL CLASS (pedagogic similarities within 2A-2B as a group, and differences between 2A-2B and other social class groups)	SCHOOL CLASSES OF LEARNERS WITH LOW SOCIAL CLASS (pedagogic similarities within 1A-1B as a group, and differences between 1A-1B and other social class groups)

Third phase of analysis

HIGH-ACHIEVING SCHOOL CLASSES (pedagogic patterns following or differing from social class trends in 3A-2A-1A)	LOWER-ACHIEVING SCHOOL CLASSES (pedagogic patterns following or differing from social class trends in 3B-2B-1B)

Fourth phase of analysis

SCHOOL CLASSES OF LEARNERS WITH HIGH SOCIAL CLASS (pedagogic similarities and differences between high and lower-achieving classes, 3A and 3B)	SCHOOL CLASSES OF LEARNERS WITH MEDIUM SOCIAL CLASS (pedagogic similarities and differences between high and lower-achieving classes, 2A and 2B)	SCHOOL CLASSES OF LEARNERS WITH LOW SOCIAL CLASS (pedagogic similarities and differences between high and lower-achieving classes, 1A and 1B)

Legend:
3A school class high in social class; high-achieving
2A school class medium in social class; high-achieving
1A school class low in social class; high-achieving
3B school class high in social class; low-achieving
2B school class medium in social class; low-achieving
1A school class low in social class; low-achieving

One of four classification and framing values has been assigned to the twenty-seven pedagogic features distinguished in the data. All four classification and framing values are considered in the description of patterns; to simplify some comparisons

values of 1 or 2 have been grouped as 'weak', and values of 3 and 4, 'strong'. It was thought that aggregating pedagogic features would have simplified the analysis, but superficial analysis of aggregated features[30] did not reveal patterns. The 27 distinct pedagogic features were coded and school classes have thus been arranged in tabular form, in "conceptually ordered matrices" (Miles and Huberman 1994: 127), for comparison. In a conceptually ordered matrix, displays are ordered by concepts or variables (ibid.): in the matrices in this chapter school classes feature in rows, while pedagogic features make up the columns. Graphic representation of comparisons is provided in Tables 20 to 30 in the text, and a separate pullout of these tables is included for the convenience of the reader.

6.3.1. Similarities within and differences between pedagogies in the two, 'high' and 'low', achievement groups

The first step in the exploration of relations between pedagogy and high percentage grades in art by learners in specific social positions is to look for patterns of similarity and difference between the three high- and three low-achieving school classes (see Table 20). Tabulated pedagogic features have been arranged for each school class, with the classes arranged for comparison in two groups, one 'high' and one 'low'-achieving. Analysis involves comparison of the top three rows in the table with the bottom three. Pedagogic features with classification and framing values of 1 and 2 are read as 'weak', and those of 3 and 4, 'strong'.

When the pedagogic features of the high and low-achieving classes are compared, three patterns can be seen. In the first of these patterns, pedagogic features are present in classes with high grades and absent in those with low grades. This pattern suggests that the features (printed in red in Table 20) are associated with high grades for learners across all social class groups; the features include:

- Weak classification of teacher-learner spaces where teachers spend most lesson time in learners' spaces

[30] Pedagogic features were initially aggregated into the theoretical categories of classification of discourses, space and agents, and framing of regulative and the selection, sequencing, pacing and evaluation criteria of instructional discourse. Classification of discourse for example included Pedagogic features 1a, 1b, 1c, 1d, and 1e.

- Weak framing of communication relations where teachers actively open dialogue with learners
- Weak micro-level framing of selection where learners select aspects of projects such as subject matter content, media and style
- Very strong framing of evaluation criteria where sought-after features are highly elaborated by the teacher

In a second pattern, pedagogic features are present across all high *and* all low-achieving classes. This pattern suggests that the features (printed in green in Table 20) are intrinsic to Art teaching; the features include:

- Strong macro-level framing of selection where the teacher selects projects
- Strong micro-level sequencing where the teacher enforces the following of different stages within projects, in sequence
- Strong framing of evaluation criteria through teacher-extension of learner selections

In a third pattern, pedagogic features are present across all high-achieving classes and sometimes but not always present in their low-achieving counterparts. These features (printed in blue in Table 20) in conjunction with other aspects of pedagogy may be associated with high grades for learners in all social class groups; the features include:

- Strong classification of consecrated and non-consecrated art discourses in classroom displays
- Scant exposure to history of art
- Strong micro-level framing of selection where teachers vet learners' choice of reference material
- High levels of conceptual demand, where projects demand engagement with metaphor

This part of the analysis, involving comparison of the top three rows in Table 20 with the bottom three rows, shows pedagogic features likely to be associated with high

percentage grades and features possibly linked to high grades for learners across all social class groups, as well as features linked to art teaching in general.

6.3.2. Similarities within and differences between pedagogies in the three social class groups 'high', 'medium' and 'low'

In the second phase of analysis patterns within and between pedagogies in the three social class groups are sought. To facilitate these comparisons tabulated pedagogic features have been arranged in three, 'high', 'middle' and 'low' social class groups (see Table 21 below). Classification and framing values of 1 and 2 are read as 'weak', and those of 3 and 4, strong. Three patterns emerge from this comparison, as follows:

Two pedagogic features are consistently associated with and vary by social class, increasing or decreasing steadily with increase or decrease in social class. These features (printed in red in Table 21) are exposure to consecrated galleries and availability of materials, both increasingly present with increase in social class.

Two further pedagogic features (printed in blue in Table 21) vary broadly with social class: references to consecrated Art are more frequent in classes with high social class than other social class groups, and weak micro-level pacing where learners work at their own paces through different stages within projects only occurred in the classes with the lowest social class.

In a third pattern, pedagogic features (printed green in Table 21) vary between the highest and lowest social class groups while classification and framing values are mixed in the middle group. Such features, namely, classification of discourses constituted by amounts of stored consecrated visual materials, classification or separation of learner-learner spaces, and framing of macro-level pacing or control of general pace and amounts of work produced, are high for the high social class group, lower for the low group, and mixed for the middle group.

Modulation of pedagogic features in line with social class may have been resource- or circumstance-related necessities, as with the visiting of galleries, availability of art-related materials, and to a degree, pacing of work covered. Both the nature of other features and the fact that these vary between higher- and lower-achieving classes in

the middle group (see features 4a, 9a, 1b) suggest that power to vary these features may have rested with teachers. This part of the analysis is useful for identifying pedagogic features varying with social class and not achievement.

6.3.3. Social class patterns in pedagogy within the high- and lower-achieving school-class groups

In the third phase of analysis patterning in the classification and framing values of pedagogic features in relation to social class *within and between* high- and lower-achieving groups is explored. There are two steps to this analysis. First, classification and framing values of pedagogic features within the two achievement groups are characterised as either similar (all weak or all strong) or varied (weak and strong value mix). Similar values can be all weak or all strong. Varied values can vary according to social class (sc) or randomly (r) (see Table 22 below).

In the second step of this analysis, variation patterns within pedagogic features are compared across the two achievement groups. Since classification and framing values can be similarly strong or weak, or varied along social class or random lines for each pedagogic feature within each achievement group, nine useful variation patterns have been identified (see Table 23).

Five implications of variation patterns in classification and framing values for each pedagogic feature within and across achievement groups have been extracted (see Table 23):

- When classification and framing values of a pedagogic feature are similarly strong or weak within *and* between achievement groups, they are thought to be necessary for and typical of all art teaching
- When values for a pedagogic feature are similar within but different between achievement groups, or similar within the high-achieving- and varying in the lower-achieving group, they are thought to be associated with high achievement for learners across all social class groups
- When values for a pedagogic feature are varied along the same social class lines in both achievement groups, they are seen to be associated with social class and not with achievement

- When classification and framing values for a pedagogic feature vary along social-class lines in the high-achieving- but not, or in a different direction, in the low-achieving group, different values for that feature are thought to be associated with achievement by learners differing with respect to social class
- When classification and framing values vary randomly for a pedagogic feature in the high-achieving group, they are not associated with achievement.

This part of the analysis, corroborated by the two earlier phases of analysis, makes possible the grouping of pedagogic features into four categories on the basis of pedagogic-feature variation-patterns within and between achievement groups. The groupings are first, features associated with achievement for all learners; second, features associated with achievement for learners in particular social class positions; third, features associated with social class but not achievement; and fourth, features associated with neither social class nor achievement. These clusters of pedagogic features, together with some refinements enabled by subsequent phases of analysis, can be seen in Table 24.

6.3.4. Comparison of pedagogic features associated with higher and lower achievement within each social-class group

In the fourth phase of analysis similarities and differences between high- and low-achieving school classes within each of the 'high', 'middle', and 'low' social class groups are explored. As with the third phase of analysis, the fourth phase has several parts. First, classification and framing values of pedagogic features *within* the three social class groups are characterised as either similar (both weak/both strong, denoted with 's') or mixed (one weak, one strong, indicated with 'm') (see Table 25).

In the second step of the analysis, couples of 'similar' and 'mixed' classification and framing values for each pedagogic feature are examined against the four groupings of pedagogic features from the third phase of analysis shown in Table 24. For most pedagogic features patterns of 'similar' and 'mixed' values match one of the four groups in Table 24; in five 'new' instances there are similarities in the classification and framing values in high-achieving classes in two of the social class groups (see Table 26). In the case of the five 'new' features classification and framing values are similar in the high-achieving classes of the highest and lowest social class groups (see

Table 27) – these two classes also being the two highest-achieving classes in the sample (see Figure 7 and Table 18). These five features are possibly linked to the achievement of high grades for learners from diverse social class groups, and are:

- Weak intra-disciplinary classification or exposure to a variety of Art languages
- Weak classification of teacher-learner time or lengthy teacher-learner interactions
- Weak framing of hierarchical relations regarding entry to and exit from classrooms
- Weak framing of regulative mode where teachers focus on Art rather than social behaviours, and make inter-personal and Art-positional rather than general social or authoritarian corrective comments
- Strong framing of macro-level sequencing where projects progress from simple imitative and technical exercises to complex requirements for engaging with metaphor

This part of the analysis is useful for identifying pedagogic features possibly associated with achievement by learners in diverse social positions.

6.4. Exploration of relations between pedagogic features and learners' aligned judgements

When school classes are ranked on the basis of numbers of learners making fully-aligned judgements, three classes are found to have over 79% of learners making aligned judgments, and three classes 73% or fewer such learners (see Table 28 below). The social class of the group of school classes in which over 79% of learners produce aligned judgements is higher than that in which fewer learners make such judgements. The classes in which high numbers of learners make aligned judgments are not all high-achieving classes with respect to percentage grades. Given the lower status of learners' artistic judgements made in response to ranking tasks than that of their percentage grades, less attention is given to analysis of relations between pedagogic features and learners' judgments than to pedagogy linked with high grades.

Pedagogic features linked to the three school classes (3B, 2A, 3A) in which high proportions of learners produce aligned judgements are compared with pedagogic features in classes (1A, 2B, 1B) in which low numbers of learners make such appraisals (see Table 29).

Table 28: Percentages of learners making aligned judgments in the classes of each teacher in the sample in the penultimate year of the study

School class	% of learners with aligned judgements
3B	81%
2A	81%
3A	79%
1A	73%
2B	71%
1B	63%

LEGEND:
3A=school class high in social class, high-achieving with respect to percentage grades
3B=school class high in social class, low-achieving with respect to percentage grades
2A=school class medium in social class, high-achieving with respect to percentage grades
2B=school class medium in social class, low-achieving with respect to percentage grades
1A=school class low in social class, high-achieving with respect to percentage grades
1B=school class low in social class, low-achieving with respect to percentage grades

6.4.1. Pedagogic features linked to learners' aligned judgments

When classification and framing values are similar in all three schools in which high numbers of learners make evaluator-aligned judgements, whether or not such features occur in the remaining three classes, these pedagogic features are said to be associated with high numbers of learners making aligned appraisals (see Table 29).

Pedagogic features associated with high numbers of learners making aligned judgments can be grouped into two sets. The first set of features (printed blue in Table 29) is linked to both high numbers of learners making aligned judgements *and* high percentage grades. Features include:

- Strong framing or teacher-explication of evaluation criteria
- Strong classification of discourse in the form of consecrated classroom displays
- Strong macro-level framing of teacher-selection of projects
- Strong micro-level framing of selection of sources of reference
- Strong micro-level sequencing of sub-components of projects

The second set of features linked to high numbers of aligned judgements (and printed in red in Table 29) is linked with classes of learners with high percentage grades and *high social class* and not with classes low in social class (compare Tables 29 and 21). These features include:

- Strong classification of the resource-based elements of stored consecrated visual materials and visits to consecrated galleries
- Strong classification or differentiation between learners
- Strong classification of or separation of learner-learner spaces
- Strong framing or teacher-control of initiation of dialogue; work-focus, and levels of sound
- Strong framing of macro and micro level pacing, or high teacher control of work pace and degree to which learners work apace

Features associated with learners' making aligned judgements are notably strongly classified and framed, making up a visible pedagogy with a high degree of learner specialisation, and teacher control of instructional and regulative discourse (Bernstein 1996: 29). This part of the analysis is useful for showing pedagogic features associated with high numbers of learners making aligned judgements, and differences in pedagogy linked to the making of aligned judgements and achievement of high percentage grades.

6.5. A pedagogic model associated with achievement in art

An attempt has been made to create a model of pedagogy associated with high percentage grades and aligned judgements by learners differing with respect to social class (see Table 32). The model is devised in three stages. First, pedagogic features are identified as belonging to one of six groups (see Table 30) delineated as a product of the five phases of analysis outlined above[31], namely:

[31] Pedagogic features associated with aligned judgements and not high percentage grades have been excluded in light of the research focus on pedagogy associated with achievement in practical art-making.

- Particular form of pedagogic feature associated with all art teaching
- Particular form of pedagogic feature associated with high percentage grades *and* aligned judgments for learners in all social class groups
- Particular form of pedagogic feature associated with high percentage grades for learners in all social class groups
- Particular form of pedagogic feature associated with high percentage grades in the top two classes
- Pedagogic feature varies in association with high percentage grades, variation follows social-class pattern
- Pedagogic features varies with social class regardless of percentage grades

Although in the design of the current study it has been necessary to have all 27 pedagogic features in distinct form in order to facilitate refined analysis, making discussion of pedagogic features manageable requires delineating them in simplified form. The second step in the creation of the model involves an attempt to simplify the way in which pedagogic features have been described.

When initial investigation into the relationship between percentage grades and *clusters* of pedagogic features was carried out prior to the five phases of analysis described above, no patterns emerged between the clusters of features and grades (see the last paragraph in Section 6.3 above). Initial clusters of features were based on the *sum* of classification and framing values of all pedagogic features in each theoretical category (see footnote at the end of Section 6.3), and did not take into account the significance of individual pedagogic features. The current aggregation of features purely for the purpose of *making discussion manageable* takes cognisance of the importance of individual features, as suggested in the five phases of analysis described above, for learners' achievement. Aggregations have been made, into twelve groups (see Table 31), in such a way so as to preserve the distinctness of pertinent features for the purpose of discussion. Table 17 with its list of individual pedagogic features has been reproduced below for the convenience of the reader.

6.5.1. Aggregation of pedagogic features

For the model, the 27 coded pedagogic features are aggregated into 12 features, each of which represents theoretical categories *as modified by* analyses carried out above (see Table 31). Features are aggregated purely for the purpose of managing discussion: aggregated features could not be used for the detailed analysis (in Sections 6.3 and 6.4) since their component parts vary with respect to power and control categorisations. Aggregating features made possible the discussion of *art*-related pedagogy, the bringing out of pedagogic features salient for the teaching of *art in general* rather than features in individual classrooms. Aggregations are described briefly.

Aggregated feature 1: Classification of discourses is a single category made up not as the sum of all pedagogic features pertaining to the classification of art discourse, but of the degree to which learners are exposed to consecrated art in the greatest way, either through the presence of consecrated classroom displays *or* other consecrated features such as stored visual material, reference to visual material, gallery visits and history of art, or several of these features (Aggregation of Pedagogic features 1a, 1b, 1c, 1d, and 1e).

Aggregated feature 2: Classification of discourses within art, or teacher-introduction of different 'languages' or styles of art (Pedagogic feature 2a).

Aggregated feature 3: Teacher-learner classification of space or the degree to which teachers and learners occupy different spaces and shared interaction times (Aggregation of Pedagogic features 3a and 3b).

Aggregated feature 4: Learner-learner classification of space or the extent to which learners share spaces and materials (Aggregation of Pedagogic features 4a and 4b).

Aggregated feature 5: Classification of agents, or the degree to which learners are differentiated (Pedagogic feature 5).

Aggregated feature 6: Framing of regulative features which in the top two achieving classes are similarly framed, namely control of entry to and exit from classrooms, the

degree to which teachers open communication relations, and regulative mode (Aggregation of Pedagogic features 6a, 6b and 6c).

Aggregated feature 7: Framing of regulative features which in the top two classes are differently framed, namely control of initiation of dialogue, work-focus and sound levels (Aggregation of Pedagogic features 6d, 6e and 6f).

Aggregated feature 8: Framing of macro selection of projects, and micro-selection of components within projects and sources of reference (Aggregation of Pedagogic features 7a, 7b and 7c).

Aggregated feature 9: Framing of macro sequencing of projects and micro sequencing of components of projects (Aggregation of Pedagogic features 8a and 8b).

Aggregated feature 10: Framing of macro pacing of amounts of work done and micro pacing of the degree to which learners work apace (Aggregation of Pedagogic features 9a and 9b).

Aggregated feature 11: Framing of evaluation criteria through teacher extension of learners' selections and elaboration of criteria (Aggregation of Pedagogic features 10a and 10b).

Aggregated feature 12: Level of conceptual demand (Pedagogic feature 12).

Table 17: Categories used for analysis of pedagogy

POWER RELATIONS
CLASSIFICATION OF DISCOURSES Classification between 'consecrated' and 'unconsecrated' art discourses 1a. classroom displays 1b. stored visuals 1c. references to consecrated art 1d. gallery exposure 1e. art history Classification between styles or 'languages' within 'consecrated' art 2. art 'languages'
CLASSIFICATION OF SPACE 3a. teacher-learner space 3b. length of individual teacher-learner interactions 4a. learner-learner space 4b. learner-learner materials
CLASSIFICATION OF AGENTS 5. differentiation between learners
CONTROL RELATIONS
FRAMING OF REGULATIVE DISCOURSE 6a. entry to/exit from the classroom 6b. control of communication 6c. regulative mode 6d. initiation of teacher-learner dialogue 6e. control of work focus 6f. balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE 7a. macro selection (of projects/processes to be carried out) 7b. micro selection (of components within projects/processes) 7c. micro selection (of sources of reference) 8a. macro sequencing (of projects/processes to be carried out) 8b. micro sequencing (of projects/processes to be carried out) 9a. macro pacing (of projects/processes to be carried out) 9b. micro pacing (of projects/processes to be carried out) 10a. explication of evaluation criteria via extension of learner selection 10b .explication of evaluation criteria via elaboration of criteria
ADDITIONAL CLASSIFICATORY FEATURE 11. level of instructional content

Table 31: Aggregated pedagogic features

Pedagogic feature numbered as in the initial round of analyses	Number of pedagogic feature in construction of the model
'classification of (fine art – non fine art) discourses' (inter-discursive classification) The degree to which consecrated fine art is distinguished for learners, through classroom displays (1a), and stored visual materials (1b), teacher-references to consecrated art (1c), exposure to consecrated galleries (1d), or exposure to history of art (1e)	1
'classification of discourses within art' (intra-discursive classification) - teacher introduction of experiences of different 'languages' or styles of art (2)	2
'teacher-learner classification' - the degree to which teachers and learners shared space (3a) - teacher-learner interaction time (3b)0	3
'learner-learner classification' - the degree to which learners shared spaces (4a) - the degree to which learners shared materials (4b)	4
'classification of agents' - the degree to which learners were differentiated (5)	5
'regulative features 6a,b,c' - entry to/exit from the classroom (6a) - the degree to which teachers opened communication relations (6b) - regulative mode (6c)	6
'regulative features 6d,e,f' - initiation of dialogue (6d) - control or work-focus (6e) - balance of sound (6f)	7
'framing of selection of processes (projects), components within processes (projects), and sources of reference' - control of macro-level selection of projects (7a) - control of micro-level selection of components within projects (7b) - control of selection of sources of reference (7c)	8
'framing of sequencing of processes (projects) over time and of components within processes (projects) - control of the sequencing of the complexity of projects (8a) - control of the sequencing of stages within projects (8b)	9
'framing of pacing' - control of the amount of work produced by learners over time (9a) - control of the degree to which learners were required to work apace (9b)	10
'framing of evaluation criteria' - degree of explicated of sought-after criteria through teacher-extension of learners' selections (10a) - degree of explication of sought-after criteria through teachers' elaboration, verbally and/or through visual example, of criteria required (10b)	11
'instructional content' - level of conceptual demand (11)	12

6.5.2. A model of pedagogic features associated with achievement in art by learners in different social class positions

A model of pedagogy associated with achievement of high grades and including some of the features linked to aligned judgements by learners differing with respect to social class, is created by using features shown to be associated with achievement in the five phases of analysis conducted (see Table 30), in aggregated form (see Table 31). The model shows pedagogic features common to high-achieving classes across social class groups; pedagogic features differing for high-achieving classes across social class groups; and pedagogic features varying according to social class irrespective of the achievement levels of learners.

Table 32: Model of pedagogic features associated with high percentage grades and aligned judgements achieved by learners in different social class positions

Pedagogic features	High-achieving school classes with high social class	High-achieving school classes with low social class
1	**Consecrated-non consecrated art discourses (C+)** Art displays (C+) - Art history (C –) (stored visual materials; references to consecrated art; and gallery visits patterned in accordance with social class; the higher the social class, the greater the exposure to these consecrated features)	**Consecrated-non consecrated art discourses (C+)** - Art displays (C+) - Art history (C –) (stored visual materials; references to consecrated art; and gallery visits patterned in accordance with social class; the higher the social class, the greater the exposure to these consecrated features)
2	**Intra-art discourses (C -)** (associated with achievement in top two classes)	**Intra-art discourses (C -)** (associated with achievement in top two classes)
3	**Teacher-learner space (C -)** (consistently associated with achievement) **Teacher–learner time (C -)** (associated with achievement in top two classes)	**Teacher-learner space (C -)** (consistently associated with achievement) **Teacher–learner time (C -)** (associated with achievement in top two classes)
4	(Learner-learner use of space and materials varies with social class regardless of achievement levels of school classes)	(Learner-learner use of space and materials varies with social class regardless of achievement levels of school classes)
5	**Classification of agents (C +)**	**Classification of agents (C -)**
6	**Regulative discourse:** **Communication relations (F -)** (consistently associated with achievement) **Classroom entry/exit (F -)** **Regulative mode (F -)** (associated with achievement in top two classes)	**Regulative discourse:** **Communication relations (F -)** (consistently associated with achievement) **Classroom entry/exit (F -)** **Regulative mode (F -)** (associated with achievement in top two classes)
7	**Regulative discourse:** **Initiation of teacher-learner dialogue (F +)** **Control of work focus (F +)** **Control of sound levels (F +)**	**Regulative discourse:** **Initiation of teacher-learner dialogue (F -)** **Control of work focus (F -)** **Control of sound levels (F -)**

8	**Framing of selection:** **Macro-selection of projects (F +);** **Micro-selection of components within projects (F -);** **Micro-selection of sources of reference (F +)** (consistently associated with achievement)	**Framing of selection:** **Macro-selection of projects (F +);** **Micro-selection of components within projects (F -);** **Micro-selection of sources of reference (F +)** (consistently associated with achievement)
9	**Framing of sequencing:** **Macro-sequencing of projects (F+)** (associated with achievement in top two classes) **Micro-sequencing of components of projects (F +)** (consistently associated with achievement)	**Framing of sequencing:** **Macro-sequencing of projects (F+)** (associated with achievement in top two classes) **Micro-sequencing of components of projects (F +)** (consistently associated with achievement)
10	(Framing of pacing, both macro control of amount of work done, and micro control of degree to which learners work apace varies with social class regardless of level of achievement of school classes)	(Framing of pacing, both macro control of amount of work done, and micro control of degree to which learners work apace varies with social class regardless of level of achievement of school classes)
11	**Framing of evaluation criteria through teacher extension of learners' selections (F +) and elaboration of criteria (F +)** (consistently associated with achievement)	**Framing of evaluation criteria through teacher extension of learners' selections (F +) and elaboration of criteria (F +)** (consistently associated with achievement)
12	**High level of conceptual demand** (consistently associated with achievement)	**High level of conceptual demand** (consistently associated with achievement)

- Pedagogic features common to high-achieving classes across social class groups
- Pedagogic features differing for high-achieving classes across social class groups
- Pedagogic features varying according to social class irrespective of achievement levels of school classes

In the following section pedagogic features associated with achievement in art are compared with those linked to success in science.

6.6. Comparison of pedagogic features associated with achievement in art and science

From the literature exploring relations between social class, pedagogy and achievement in science (for example Morais et al 1992 and 1995; Morais and Miranda 1996; Morais 1998; Morais and Pires 2002), association between specific pedagogic features and achievement by learners in particular social positions is expected. Anticipated power-related features are:

- Strong classification between both academic and non-academic discourses, and between science- and other academic discourses

- Weak micro-level classification of discourses where examples from everyday life are introduced
- Weak intra-disciplinary classification where links are made between different sections of the discipline
- Weak classification of teacher-learner and learner-learner spaces
- Strong classification of teachers and learners as agents
- Weak classification between learners

Prospective control-related features are:

- Weak framing of hierarchical relations
- Strong macro-level together with weak micro-level selection, sequencing and pacing
- Very strong framing or explication of evaluation criteria

The six features most closely associated with acquisition of complex competences in science are first, strong explication of evaluation criteria; second, weak classification of classroom spaces and open communication relations, followed by weak micro-framing of pacing, and strong classification of academic-non academic discourses and intra-disciplinary relations (Morais and Pires 2002).

In addition to the "how" of teaching constituted by the above, there are also expectations regarding "what" was taught, expressed by Morais and Pires (2002: 4) in terms of "scientific knowledge" and "investigative competence". This knowledge is elsewhere expressed as "level of conceptual demand" (see Domingos 1989). Given the process-orientation and weak knowledge structure of art (Bernstein 1996; 1999; 2000b) with its concomitant differing versions of curricula (Fuller 1990; Karpati 1995; Eisner 2002; Chalmers 2004; Elfland 2004a; Stankiewicz et al 2004; White 2004;), I define the 'what' (the content) of art at senior secondary school level in terms of observed and documented project requirements. I take content level as high when the focus in projects requires engagement with metaphor and ideas as well as technical aspects, and low when descriptive representation or technical aspects only are called for.

Pedagogic features associated with high percentage grades (some of which are associated with aligned judgments) in art and possession of complex cognitive competences in science, are found to be similar (see Table 33). Three differences emerge (see Table 33).

First, learner-learner spaces classified weakly in pedagogy associated with high achievement in science (Morais 2002a) is classified differently for high-achieving learners in different social class positions in the current study. In art classrooms, classification of learner use of space and materials is strong in high social class contexts (with learners working in separate areas and with their own materials), and decreases in line with the lowering of social class. Learners in the lowest social class contexts share materials and continually move into each other's spaces to do so. It is argued that the difference in use of space between science and art classrooms is based on differences between the two disciplines. In science lessons, weak classification of learner-learner space is constituted by group-work: learners are collectively investigating phenomena in the objective world. In art classes individuals are creating visual equivalents for subjective responses to selected themes. While the latter requirement may necessitate weak classification of learner spaces in contexts with scarce resources, it is not otherwise associated with group-work.

A second set of pedagogic features differing somewhat between achievement in science and art, is framing of selection. In science, strong macro-level selection of themes and contents by teachers together with weak micro-level selection where learners can introduce some examples is associated with achievement (Morais et al 1995: 13). Corresponding values are associated with achievement in art: teacher-selection of projects and some learner choice regarding the sub-components within projects. This framing provides guidance for learners as well as allowing for individual interest, aptitude, and approach. Also linked to high achievement in art however, is strong micro-level framing of sources of reference, where teachers provide or suggest which visual material to refer to in the creation of artworks by learners, or vet learners' selections of imagery. I postulate that selection of sources of reference is one of the mechanisms of induction into consecrated art traditions.

Sequencing constitutes the third pedagogic feature differing in association with achievement between Art and Science. Strong macro-level- together with weak micro-level sequencing are linked to achievement in Science, where the teacher orders themes and concepts, and allows learners' contributions to slightly alter the sequencing of lessons (Morais et al 1995: 14). For art, strong macro-level sequencing appears less associated with achievement than for Science, in that it occurs in only two of three high-achieving classes. I define macro-level sequencing in art, given the weakness of its discursive structure, in terms of the level of complexity of projects – simpler projects requiring inter-relation of few elements, and more complex ones calling for engagement with metaphor, idea, and the inter-relation of multiple elements. Perhaps important to note is the *way* in which macro-level sequencing is weakened in some instances. In an observed classroom with strong macro-sequencing there was broad increase in the complexity of projects with time, together with opportunity for learners to sequence projects themselves. The opportunity for learner selection was facilitated through the teacher's inclusion, in lists of potentially symbolic themes provided with each project change, of an "own choice" option. Most learners were observed working with teacher-selected themes and therefore experienced a teacher-sequenced curriculum; a small number sequenced their own.

Unlike with Science, strong micro-level sequencing is associated with achievement in art. Strong micro-sequencing in art comprises following a teacher-set order of project phases such as discussing, researching, sketching, planning, and creating 'finished' artworks. It is possible that following set sequences of procedures facilitates teachers' steering of learners towards the meeting of evaluation criteria, by opening the creative process to guidance at several critical points. Strong micro-sequencing is most marked in the top two classes in the study with the teachers ensuring research and planning through 'enforced' participation in research-planning activities at arranged sites and times.

Table 33: A comparison of pedagogic features associated with achievement in art and science (differences highlighted in red)

Pedagogic features associated with achievement in science (from Morais et al 1992 and 1995; Morais and Pires 2002)	Pedagogic features associated with achievement in art
Classification of discourses - macro-level academic/non-academic (+) - micro-level academic/non-academic (-) - intra-disciplinary relations (-)	Classification of discourses - consecrated-unconsecrated art (+) - intra-disciplinary relations (between 'languages' or styles within art (-)
Classification of space - teacher-learner spaces (-) - learner-learner spaces (-)	Classification of space - teacher-learner space (-) - teacher-learner interaction time (-) - learner-learner use of space and materials (+/-) (varies with social class and not achievement)
Classification of agents - teacher-learner (+) - learner-learner (-)	Classification of agents - learner-learner (+/-) (varies with social class and not achievement)
Framing of regulative discourse - hierarchical rules (-) (weakens with decrease in social class) - communication relations (-)	Framing of regulative discourse - hierarchical rules (-) (weakens with decrease in social class) - open communication relations (-)
Framing of instructional discourse - macro level selection of content(+) - micro level selection of examples (-)	Framing of instructional discourse - macro level selection of projects (+) - micro level selection of components of projects (-) - micro selection of sources of reference (+)
Framing of instructional discourse - macro level sequencing of content (+) - micro level sequencing within lessons (-)	Framing of instructional discourse - macro level sequencing of projects (+) - micro level sequencing of the stages within projects(+)
Framing of instructional discourse - macro level pacing (+) - micro level pacing (-)	Framing of instructional discourse - macro level pacing (+/-) - micro level pacing (+/-) (varies with social class and not achievement)
Framing of instructional discourse - evaluation criteria (+ +)	Framing of instructional discourse - evaluation criteria (+ +)
The 'what' of pedagogy - teachers' investigative competence/scientific knowledge/level of conceptual demand (+)	The 'what' of pedagogy - level of conceptual demand/demand for engagement with metaphor (+)

LEGEND
+ strong classification/framing/level of conceptual demand
- weak classification/framing/level of conceptual demand
• Pedagogic features associated with high achievement in art and science
• Pedagogic features associated with high achievement in art but not in science

6.7. Pedagogic features associated with achievement in art: discussion

In this section the inter-relation of pedagogic features linked to art learners' high percentage grades is discussed. Although the focus is on the mechanics of pedagogy associated with achievement in art, comparisons are drawn with pedagogy linked to success in science.

6.7.1. Explication of evaluation criteria and related pedagogic features

It is known that apart from teachers' levels of disciplinary knowledge and skill, certain pedagogic features in the transfer of these competences are linked to acquisition of complex cognitive competences in science (Morais et al 1995; Morais and Pires 2002 and 2004). In the transmission and acquisition of science knowledge and skills, most significant is the explication of evaluation criteria; the second most important is weak classification of classroom spaces and following these, of equal importance are open communication relations; weak micro-framing of pacing; and strong classification of academic-non academic discourses and intra-disciplinary relations (Morais and Pires 2002 and 2004). Further, Morais and Pires (2002 and 2004) sketch the roles of all of these features in facilitating explication of criteria.

Almost all of these features are also consistently associated with acquisition of complex art-making skills, and some are linked to the making of evaluator-aligned aesthetic judgements. The analytical tools used in the present study do not facilitate the ranking of pedagogic features in order of significance. The analysis undertaken does however show features consistently associated with acquisition of sought-after art competences; features sometimes linked to possession of skills; features related to success for learners in different social positions, and features apparently adjusted by teachers according to learners' social positions regardless of their levels of achievement. It can be inferred that pedagogic features consistently associated with possession of sought-after art skills are important for acquisition of these skills. Relationships between features based on previous literature, and observation and analysis in the current study, are suggested below.

As in the science literature (Morais and Pires 2002), in the current research both explication of evaluation criteria and complex content are associated with high percentage grades in art (see Table 20). Explication of criteria for art occurs in two ways. First, teachers extend learners' selections verbally or visually or both. Verbal extension constitutes teachers' interrogation of learners' ideas and/or visual productions, in all cases involving suggestions beyond those which learners have themselves conceived or created. Visual extension similarly involves teacher-guided development of learners' productions, through the showing of examples by demonstration or from the history of art and other consecrated sources. Another way

in which teachers explicate criteria is through elaboration, explaining and correcting aspects of learners' production verbally, with or without visual demonstration.

I argue that part of being able to realise sought-after qualities in practical art-making and aligned aesthetic judgements involves knowledge of shared criteria. It has often been noted in the literature, that shared criteria need to be established (see Barrett 1990: 302-3, 310-12; MacGregor 1990: 323-4; Hermans 1991: 76-7; MacDonald 1991; Davies 1992: 73-4; Blaikie 1994: 304; Steers 1994: 291; Cannatella 2001: 321-2) and made explicit (Schonau 1991: 85-6 and 1999: 186; Davies 1992: 73 and 1996: 329, 331). Sought-after criteria are established through verbal and visual explication, both of which narrow the possibilities for multiple interpretations by learners.

Three of the remaining significant pedagogic features for acquisition of science competences (see Morais and Pires 2002) are also consistently linked to high percentage grades in art, and a fourth is weakly tied with the latter. I suggest that each of these plays a role in the establishment of shared criteria and the explication of these criteria. First, open communication relations make possible teachers' interrogation and shaping of learners' ideas and productions. If teachers are to question and build on conceptualisations informing the art-works of individual learners as well as the material forms to which these frameworks give rise, learners need to make substantial contributions to the dialogue. Dialogue depends on learners' contributions and teachers' ability to understand and extend these, necessitating open communication relations.

It is thought that other pedagogic features consistently associated with acquisition of sought-after competences in art (as in science) facilitate or are linked to the opening of communication relations and thereby the explication of criteria. Features linked to the opening of communication relations include weak classification or blurring of the boundaries between teacher and learner spaces, and to a lesser extent (associated with only two of three high-achieving classes in the current study), weak classification of teacher-learner time or the teacher spending long periods interacting with learners; and weak teacher control of classroom entry/exit and regulative mode (use of respectful personal rather than authoritarian positional communications, and making references to art- rather than other social norms). Both of the latter can be said to

contribute towards 'horizontal' rather than authoritarian dialogue and be more likely to open communication relations.

A further two features associated with achievement in science, namely strong classification of academic and non-academic discourses and weak intra-disciplinary classification of discourses (between the different sub-disciplines of science), are also linked to an extent[32] with high percentage grades in art. I posit that both of these features, as well as strong macro-control of selection of projects and micro-selection of sources of reference contribute towards making shared criteria visible in art.

Science is a vertically structured content-rich form of knowledge (Bernstein 1996: 173): strong classification between science and everyday knowledge and weak classification between sub-sections within science arguably make visible its specialised content and facilitate understanding of this content respectively. Knowing, in practical art-making, is not so much knowledge of content, as an ability to work within one or between several of consecrated art's different 'languages' or as Bernstein (2000a: 163-4) puts it, possession of the 'gaze' with which these modes are recognised. I suggest that strong classification of consecrated and non-consecrated art serves, as in science, to make visible, examples in which specialised criteria are displayed, while weak classification of different consecrated modes of art-making exposes the roots of evaluation criteria. It was expected that exposure to many rather than few styles would provide learners with richer potential source-material and a greater range of sought-after criteria; however, working with few styles does not appear to lower percentage grades.

It is also likely that specialised knowledge and skill is manifest in both teachers' construction of projects (macro control of selection) and vetting of learners' selections of sources of reference (micro control of selection). Both teacher-construction of projects and control of sources of reference serve to define the limits of the possible or what Eisner (2002: 72-4) has described as "constraints" and "affordances", underscoring the legitimacy or otherwise of certain processes and criteria.

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[32] Weak intra-disciplinary classification of discourses was linked with high percentage grades in only two of the three high-achieving classes in the sample, however, these classes were the two highest-achieving classes.

Of the five aspects used to describe classification of consecrated and non-consecrated art discourses (classroom displays; stored visuals; teacher-references to consecrated art; gallery visits and history of art), only consecrated displays are consistently present in classrooms of high-achieving classes: works on display are exemplars of the types of art required. Exposure to history of art, thought necessary to provide tradition or a cognitive map within which teachers and learners can locate practical art-making (Cunliffe 1992), contrary to expectation, is not linked to high percentage grades. One possible explanation for this could be the freeing of time for practical work. Another, given that history of art requires word-related analytical skills commonly perceived as beyond the interest or capabilities of many learners, is that teachers transmit this indirectly, through their own evaluations and demonstrations.

Other practices in which classification of discourses is visible, namely in stored visuals, references to consecrated art-works, and gallery visits, show weakening of classification with decrease in social class. While classes of learners with high social class experience consecrated discourse in many ways, it appears that strong classification of discourses through classroom displays, together with explication of criteria and other features facilitating this elaboration of criteria, is sufficient for high percentage grades.

Interestingly, high levels of conceptual demand, although associated with high levels of achievement in art and science, are on their own insufficient for high achievement: pedagogy in one of the low-achieving schools in the sample includes complex projects – projects requiring engagement with metaphor. In this pedagogy, features such as strong classification of consecrated and non-consecrated discourse, teacher selection of sources of reference, strong teacher elaboration of evaluation criteria, and open communication relations, present in high-achieving classes, are absent. It can be said that the absence of these features effectively removes 'steps' necessary in the realisation of criteria in complex projects.

6.7.2. Sequencing, pacing, and the sizes of 'steps'

Learners are guided to different degrees, in their exploration of metaphors and ideas and inter-relation of these with technical elements, in complex art projects. Such

processes are seldom stumbled upon through use of common-sense. Facilitation of the processes appears to depend on teachers' knowledge of them, and teachers' extension of learners' ideas and creations through dialogue and the showing of visual examples. I argue that sequencing and pacing together create the sizes of 'steps' learners are required to take in order to realise sought-after criteria.

The strong macro–sequencing associated with achievement in science (Morais 1995; Morais and Pires 2002) is only sometimes linked to high percentage grades in art: in only two of three high-achieving schools were projects strongly sequenced (organised progressively from relatively simple composition-type exercises to complex procedures requiring exploration and inter-relation of ideas and technical elements).

Weak micro-sequencing associated with achievement in science (Morais et al 1995) is not mirrored in art teaching: there was strong micro-sequencing or strong sequencing of the stages within projects in all observed classes in the present study. It is argued that strong micro-sequencing is necessary since the content of the art curriculum constitutes mastery of complex processes such as, for example, finding material form for visual metaphors. These processes consist of a series of sub-processes such as researching potential imagery, developing personalised imagery from researched images, finding the technical means to realise personalised imagery, and aesthetically manipulating material forms – none of which can be executed successfully without following the process prior to it in this list. It appears that distances or 'steps' between sub-processes are too large if some of these sub-stages are missing. Further, there is a sense in which teacher-learner dialogue, when actively opened by teachers and contributed to by learners, constitutes micro-steps within sub-processes. It appears that in the absence of open dialogue, the distances between sub-processes can also be too large. There are parallel notions in the literature: where teachers "scaffold" learners' making of new connections through conversation (Eltland 2004b: 771-2); "co-construct" learners' thinking (Eisner 2002: 47); "negotiate" understanding (Barrett 1990: 302) or act as "discourse leaders" or "connection forgers" according to individuals' needs (Mitchell 1996). I argue that open dialogue serves to assist what Muller (2000, and in Muller and Taylor 1995) refers to as negotiating the crossing of the boundary between everyday and esoteric knowledge. In this case dialogue serves to "redescribe" and "translate" (ibid.) suitable examples from the everyday domain, in

the course of following specialized processes, in order to get learners to look with a specialized (fine art) gaze on the everyday.

Pacing in pedagogy in art classrooms has been found to vary along social class lines, with respect to both amounts of work produced and the degree to which learners are expected to work apace, decreasing with decrease in social class. Pacing linked to successful science pedagogy, in contrast, is strongly framed at the macro-level and weakened at micro-levels (Morais et al 1995). It is suggested that pacing in art classrooms is influenced by the amount of time required to go through the sub-stages of projects.

6.7.3. Pedagogic features varying across high-achieving classes and 'instructional-regulative packages'

Two pedagogic features differ along social class lines across high-achieving art classes. The first of these, the strength of classification of agents or the degree to which teachers differentiate between learners, increases with increase in social class. In observed upper-middle class contexts teachers usually engaged in dialogue with *individual* learners; in less privileged situations additional individuals spontaneously contributed to dialogue so that communications were built *collectively* rather than between teachers and single learners. I suggest that this collectivity increases the openness of communication relations in situations where they are not otherwise as open, thereby facilitating elaboration of sought-after criteria.

Secondly, teacher-control of certain regulative features, namely, initiation of dialogue, work-focus, and sound levels, has been found to decrease with social class across high-achieving classes. Other regulative features, control of classroom entry/exit and regulative mode, also vary across high-achieving classes although not in relation to social class, with the top two teachers showing weak control of entry and exit, and respectful (and art-conduct related) rather than authoritarian (and social-positional) regulative comments. The teacher of the third high-achieving class in the sample was observed controlling entry and exit more tightly and making more authoritarian person-focussed communications than the top-achieving teachers. On one hand it is tempting to say that control of regulative discourse does not matter, that it varies across high-achieving classes. However, it is difficult to imagine that lack of work-

focus does not impact negatively on production. I argue for the idea of 'instructional-regulative packages' in which there are clear sought-after curricular criteria and privileged modes of achieving these through differing combinations of instructional and regulative features.

In the geographic region in which the current research was conducted, one or two officials moderated final-year exhibitions in each year of the study. These people and the teachers with whom they worked shared evaluation criteria (see Chapter 4, section 4.1.2). Although teachers in the study all worked towards facilitating learners' acquisition of technical skills, ability to manipulate complex content, and originality, they used different combinations of instructional- and regulative features to do so (see Table 20 above). However, the general character of work-related dialogue between teachers and learners in high-achieving classes could be described as 'collegial' or 'respectful' (see dialogue in Appendix 9, for example), a quality noted in the literature as facilitating creativity (Varkalis 1992).

In all three high-achieving sets of classes in the present research, content was complex; explication of evaluation criteria was clear; there were one or more ways in which consecrated art was clearly separated from non-consecrated art; boundaries between teachers' and learners' spaces were blurred and communication relations open; and selection of projects and micro-level sources of reference, and sequencing of sub-stages of processes strongly controlled. In the high-achieving upper- and mid-middle class classrooms, these features were accompanied with strong pacing; strong classification of individual engagement with learners; and relatively strong teacher control of work-focus and levels of sound: the ambience could be said to have been 'businesslike'. The two classes differed in that in the upper-middle class context, the teacher initiated dialogue with different individuals almost continually; in the mid-middle class classroom the teacher actively encouraged the initiation of dialogue by learners.

In the high-achieving lower middle class classroom, pacing; classification of learners; and teacher-control of work-focus, movement and sound levels were relatively weak: the character of lessons could be described as 'relaxed'. Learners frequently

approached the teacher and initiated work- and non-work related dialogue, to all of which the teacher responded generously.

None of these 'businesslike' or 'relaxed' pedagogic characteristics militated against the operation of a collegial mode of interaction with respect to discussion of work, or against features such as explicit criteria and others associated with high achievement levels: in fact, they may have served to facilitate collegial relations. The suggestion is thus made here, that different forms of regulative discourse, rather than not mattering, are required in different contexts to facilitate specific communication modes suited to particular curricular objectives or to target social groups with different coding orientations to meaning.

6.7.4. Micro-selection of components of projects

Weak micro-selection of components of Art projects, paralleling weak micro-selection of examples in science (Morais et al 1995), is associated with high levels of achievement. When selecting components of projects, learners have choice with respect to aspects such as media, subject matter, techniques and use of materials. It is thought that learners might make selections on the basis of their own interest and competence, and that this control might have positive consequences for both their commitment to their work, and the fostering of individuality – originality being a much sought-after quality in Art making at school and beyond.

6.7.5. Pedagogic features varying with social class regardless of average achievement in school classes

Some pedagogic features vary with social class irrespective of levels of achievement. These features, apart from the already-mentioned exposure to consecrated discourses, include time- and resource-based differences. Classification of learner-learner spaces weakens with decrease in social class: the greater the shortage of materials, the more sharing and learners' moving into each other's spaces to do so. Pacing similarly weakens, at the macro-level of amounts of work produced, and at the micro level where learners worked at their own paces.

6.8. Chapter summary

At the start of this chapter the suitability for comparison of the six school classes selected for detailed study was ascertained. Since patterns in the average grades of the six sets of classes were consistent for each teacher and the social class and achievement groups in the four years of the study, it was possible to explore whatever was enduring. Since the ranking of the six sets of classes remained constant over four years and did not run in accordance with privilege, the significance of pedagogy was suggested.

Relations between pedagogic features, learners' percentage grades and aligned judgments, and learners' social positions were explored by comparing pedagogic features in different social class and achievement groups. Based on these analyses a model of pedagogy linked to achievement in Art for learners in different social positions was devised: characteristics of pedagogy in the model are summarised below.

6.8.1. Summary characterisation of pedagogy associated with high percentage grades

Achievement of high percentage grades in art by *all* learners is linked to high levels of conceptual demand and explication of shared criteria, and pedagogic features facilitating the latter. Features thought to enhance explication of criteria include provision of exemplars of consecrated art primarily through classroom displays, and strong teacher control of selection of projects and sources of reference. Explication of sought-after criteria is also thought to be furthered by open teacher-learner communication relations, where teachers actively interrogate learners' ideas and productions, and use of space where teachers spend most lesson time amongst learners. 'Steps' towards realisation of sought-after criteria are provided with strong teacher-control of the sequencing of series of sub-processes carried out by learners in projects, and through open communication relations where teachers build on learners' contributions. Learner-control of selection of components within projects, also linked to high grades, is thought to increase learners' work-involvement through allowing selection on the basis of interest.

High achievement for learners in high social class positions is also associated with strong classification or differentiation of learners, and strong teacher-control of initiation of dialogue, work-focus, and sound levels. Counter to expectation, high achievement for learners in lower social positions is linked to weaker classification and framing of these features.

Some features vary with social class irrespective of learners' achievement levels: these are control of pacing, use of space and materials by learners, and some ways in which consecrated discourse is classified (stored visual materials; references to consecrated art; gallery visits).

6.8.2. Summary characterisation of pedagogy associated with linked to with aligned aesthetic judgements

The making of aligned aesthetic judgements is linked to two clusters of pedagogic features. The first, namely, explication of criteria, consecrated classroom displays, teacher-selection of projects and sources of reference, and teacher-control of micro-sequencing of the components of projects, is also associated with high grades for all learners.

The second group of features linked to aligned judgements is associated with high practical Art grades for learners in high and middling social class positions but not those in lower social positions. These features include strong classification of discourses in the form of stored visual materials and gallery visits; strong classification of learners in terms of differentiation and learner-learner spaces; and strong teacher-control of pacing, initiation of dialogue, work-focus, and sound levels. Achievement of high percentage grades is linked to weakly framed forms of these features for lower middle-class learners.

6.8.3. Pedagogy linked to success in art and science classrooms

Pedagogy linked to success in practical Art-making is similar to that associated with achievement in science, with two notable differences. First, while micro-level selection of examples is weakly framed in pedagogy linked to achievement in science, micro-level selection of sources of reference is strongly teacher-controlled in art classes with high average grades. Second, while micro-level sequencing in successful

science classrooms is weakly framed, allowing learner input to alter the sequence of lessons, that in successful art classrooms is strongly framed with teachers insisting on learners' following of a set sequence of processes in the completion of projects. Both of these differences are thought to relate to differences between art and science as forms of knowledge. In science where knowledge is content-based, learners can select examples and alter the sequence of lessons with queries in the process of acquiring knowledge. In art where knowledge involves recognition of and ability to work in different art languages, teachers as initiates need to provide exemplars and to lead learners through specialised processes in order for them to recognise and realise criteria respectively.

The concluding chapter relates these findings back to the research question, and theory and literature in which the current study is located. It addresses some limitations and contributions of the research.

Table 20: Classification and framing values of pedagogic features in two groups of school classes, '3A-2A-1A' being 'high'- and '3B-2B-1B' 'lower'-achieving

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3A	4	4	3	4	1	1	1	2	3	3	4	1	2	2	3	4	4	4	1	4	4	4	4	3	4	4	4
2A	3	3	1	3	1	3	2	3	3	2	4	3	2	3	3	4	3	3	1	4	1	3	4	4	4	4	4
1A	4	1	2	2	1	2	2	2	1	1	2	1	2	2	2	2	1	4	1	3	3	3	2	2	3	4	3

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3B	3	4	3	4	3	1	4	4	3	4	3	2	3	2	4	4	3	4	3	3	3	3	3	3	3	2	2
2B	3	2	2	3	3	1	3	3	2	2	3	2	3	1	3	2	1	4	3	3	4	3	2	3	3	3	2
1B	2	2	1	1	1	3	3	3	2	1	4	3	3	2	4	3	3	4	2	2	3	3	2	1	3	2	4

LEGEND:
SCHOOL CLASSES:
3A=school class high in social class; high-achieving, 3B= school class high in social class, low-achieving
2A=school class medium in social class, high-achieving; 2B=school class medium in social class, low-achieving
1A=school class low in social class; lower-achieving; 1A=school class low in social class; low-achieving
CLASSIFICATION AND FRAMING VALUES
1=very weak classification/ framing/ very low content level
2=weak classification/ framing/ low content level
3=strong classification/ framing/ high content level
4=very strong classification/ framing/ very high content level
CLASSIFICATION OF DISCOURSES:
1a=classroom displays; 1b=stored visuals; 1c=references to consecrated art, 1d=gallery exposure; 1e=exposure to art history; 2=art 'languages'
CLASSIFICATION OF SPACE:
3a=teacher-learner space; 3b=teacher-learner interaction time; 4a=learner-learner space; 4b=learner-learner materials
CLASSIFICATION OF AGENTS
5=degree of differentiation of learners
FRAMING OF REGULATIVE DISCOURSE
6a=entry to/ exit from the classroom; 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE
7a=macro selection; 7b=micro selection (of components within projects); 7c=micro selection (of sources of reference); 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing; 10a=explication of evaluation criteria via extension of learner selection; 10b=explication of evaluation criteria via elaboration of criteria
ADDITIONAL FEATURE
11=instructional content
red=pedagogic features present in high achieving- and absent in low-achieving classes
blue=pedagogic features present in all high-achieving and some low-achieving classes
green=pedagogic features present in classes of all six teachers in the study

Table 21: Classification and framing values of pedagogic features in three groups of school classes differing with respect to social class

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3A	4	4	3	4	1	1	1	2	3	3	4	1	2	2	3	4	4	4	1	4	4	4	4	3	4	4	4
3B	3	4	3	4	3	2	4	4	3	4	3	3	3	2	4	4	3	4	3	3	3	3	3	3	3	2	2

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
2A	3	3	1	3	1	3	2	3	3	2	4	3	2	3	3	4	3	3	1	4	1	3	4	4	4	4	4
2B	3	2	2	3	3	2	2	3	2	2	3	2	3	1	3	2	1	4	2	3	4	3	2	3	3	3	2

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
1A	4	4	2	2	1	2	2	2	1	1	2	1	2	2	2	2	1	4	1	2	2	3	2	2	3	4	3
1B	2	2	1	1	1	3	3	3	2	1	4	3	3	2	4	3	3	4	2	2	2	3	2	1	3	2	4

LEGEND
3A=school class high in social class, high-achieving; 3B=school class high in social class, low-achieving
2A=school class medium in social class, high-achieving; 2B=school class medium in social class, low-achieving
1A=school class low in social class, high-achieving; 1B=school class low in social class, low-achieving
CLASSIFICATION AND FRAMING VALUES
1=very weak classification/ framing/ very low content level
2=weak classification/ framing/ low content level
3=strong classification/ framing/ high content level
4=very strong classification/ framing/ very high content level
CLASSIFICATION OF DISCOURSES
1a=classroom displays; 1b=stored visuals; 1c=references to consecrated art; 1d=gallery exposure; 1e=exposure to art history; 2=art 'languages'
CLASSIFICATION OF SPACE
3a=teacher-learner space; 3b=teacher-learner interaction time; 4a=learner-learner space; 4b=learner-learner materials
CLASSIFICATION OF AGENTS
5=degree of differentiation of learners
FRAMING OF REGULATIVE DISCOURSE
6a=entry to/ exit from the classroom; 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE
7a=macro selection; 7b=micro selection (of components within projects); 7c=micro selection (of sources of reference); 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing; 10a=explication of evaluation criteria via extension of learner selection; 10b=explication of evaluation criteria via elaboration of criteria
ADDITIONAL FEATURE
11=instructional content
red=pedagogic features varying steadily with variation in social class
blue=pedagogic features varying broadly with variation in social class
green=pedagogic features varying in line with high and low social class groups and raised in the middle social class group

Table 22: Classification and framing values of pedagogic features in the two, high- and lower-achieving groups of school classes, and social class similarities and variation in both groups

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3A	4	4	3	4	1	1	1	2	3	3	4	1	2	2	3	4	4	4	1	4	4	4	4	3	4	4	4
2A	3	3	1	3	1	3	2	3	3	2	4	3	2	3	3	4	3	3	1	4	1	3	4	4	4	4	4
1A	4	1	2	2	1	2	2	2	1	1	2	1	2	2	2	2	1	4	1	3	3	3	2	2	3	4	3
3A	S	V	V	V	S	V	S	V	V	V	V	V	S	V	V	V	V	S	S	S	V	S	V	V	S	S	S
2A	(H)	(S)	(S)	(S)	(L)	(n)	(L)	(n)	(S)	(S)	(S)	(n)	(L)	(n)	(S)	(S)	(S)	(H)	(L)	(H)	(n)	(H)	(S)	(n)	(H)	(H)	(H)
1A																											
3B	3	4	3	4	3	1	4	4	3	4	3	2	3	2	4	4	3	4	3	3	3	3	3	3	3	2	2
2B	3	2	2	3	3	1	3	3	2	2	3	2	3	1	3	2	1	4	3	3	4	3	2	3	3	3	2
1B	2	2	1	1	1	3	3	3	2	1	4	3	3	2	4	3	3	4	2	2	3	3	2	1	3	2	4
3B	V	V	V	V	V	V	S	S	V	V	S	V	S	S	S	V	V	S	V	V	S	S	V	V	S	V	V
2B	(S)	(S)	(S)	(S)	(S)	(S)	(H)	(H)	(S)	(S)	(H)	(S)	(H)	(L)	(H)	(n)	(n)	(H)	(S)	(S)	(H)	(H)	(S)	(S)	(H)	(n)	(S)
1B																											

LEGEND:
SCHOOL CLASSES:
3A=school class high in social class, high-achieving; 3B=school class high in social class, low-achieving
2A=school class medium in social class, high achieving; 2B=school class medium in social class; low-achieving
1A=school class medium in social class, high-achieving; 1B=school class low in social class; low-achieving
CLASSIFICATION AND FRAMING VALUES
1=very weak classification/ framing/ very low content level; 2=weak classification/ framing/ low content level
3=strong classification/ framing/ high content level; 4=very strong classification/ framing/ very high content level
CLASSIFICATION OF DISCOURSES:
1a=classroom displays; 1b=stored visuals; 1c=references to consecrated art; 1d=gallery exposure; 1e=exposure to art history; 2=art languages
CLASSIFICATION OF SPACE:
3a=teacher-learner space; 3b=teacher-learner interaction time; 4a=learner-learner space; 4b= learner-learner materials
CLASSIFICATION OF AGENTS
5=degree of differentiation of learners
FRAMING OF REGULATIVE DISCOURSE
6a=entry to/ exit from the classroom; 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE
7a=macro selection; 7b=micro selection (of components within projects); 7c=micro selection (of sources of reference); 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing;
10a=explication of evaluation criteria via extension of learner selection; 10b=explication of evaluation criteria via elaboration of criteria
ADDITIONAL FEATURE
11=instructional content
S (H/L)=classification/ framing values similarly high/ low within achievement group
V (S/n)=social class/ no social class pattern in variation of classification and framing values

Table 23: Combinations of within-pedagogic-feature variation and possible implications

High achieving classes	SIM (high/low)	SIM* (high/low)	SIM* (high/low)	SIM* (high/low)	VAR (social class)	VAR# (social class)	VAR# (social class)	VAR# (social class)	VAR (random)
Low achieving classes	SIM (high/low)	SIM (low/high)	VAR (social class)	VAR (random)	VAR (social class, variation in same direction)	VAR (social class, variation in different direction)	VAR (random)	SIM (high/ low)	VAR (social class); VAR (random); SIM (high/low)
Implications	Necessary features of an teaching	Features associated with achievement for all learners	Features associated with achievement for all learners	Features associated with achievement for all learners	Variation associated with social class rather than achievement	Particular C/F strengths # associated with achievement by learners in specific social positions	Particular C/F strengths # associated with achievement by learners in specific social positions	Particular C/F strengths # associated with achievement by learners in specific social positions	Not meaningful with respect to achievement
Pedagogic features	7a; 8b; 10a	3a; 6b	1a; 1e; 7b; 7c; 11	10b	1b; 1c; 1d; 4a; 4b; 9a		6e; 6f	5; 6d	2; 3b; 6a; 6c; 8a; 9b

LEGEND
SIM (high/ low)=similarly high/ similarly low classification/ framing values within achievement group
VAR (social class/ random)=social class patterns in/ random variation in classification and framing values within achievement group
CLASSIFICATION OF DISCOURSES: 1a=classroom displays, 1b=stored visuals: 1c=references to consecrated art, 1d=gallery exposure: 1e=exposure to art history, 2=art 'languages'
CLASSIFICATION OF SPACE: 3a=teacher-learner space; 3b=teacher-learner interaction time; 4a=learner-learner space, 4b=learner-learner materials
CLASSIFICATION OF AGENTS 5=degree of differentiation of learners
FRAMING OF REGULATIVE DISCOURSE
6a=entry to/ exit from the classroom, 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE
7a=macro selection; 7b=micro selection (of components within projects); 7c=micro selection (of sources of reference), 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing.
10a=explication of evaluation criteria via extension of learner selection, 10b=explication of evaluation criteria via elaboration of criteria
ADDITIONAL FEATURE
11=instructional content

Table 24: Degree of association of pedagogic features and achievement for learners in general, and learners in specific social positions

GROUP 1: Pedagogic features associated with art teaching and achievement for all learners	GROUP 2: Pedagogic features varying with social class and not achievement	GROUP 3: Pedagogic features for which different classification and framing values were associated with achievement for learners in different social positions	GROUP 4: Pedagogic features not strongly associated with achievement or social class
○ **pedagogic features associated with all high-achieving school classes and all or most lower-achieving school classes (see first phase of analysis and Table 20)**	× **pedagogic feature varying uniformly or roughly with social class regardless of achievement level of school class (see second phase of analysis and Table 21)**	■ **pedagogic feature varied across high-achieving classes ; variation follows social-class pattern (see third phase of analysis and Tables 22 and 23)**	☐ **pedagogic feature varied across high-achieving classes; no clear pattern in variation (see third phase of analysis and Tables 22 and 23) but weakly associated with high achievement/associated with achievement in the top two classes (see fourth phase of analysis and Tables 25, 26, 27)**
○ 1a.strong classification of discourses (classroom displays) (✓)	× 1b.classification of discourses (stored visual materials)	■ 5.classification of agents (increase in strength with increase in social class)	☐ 2.intra-disciplinary classification of discourses (classification of art 'languages' or styles
○ 1c.weak classification of discourses (history of art)	× 1c.classification of discourses (references to consecrated art)	■ 6d.framing of hierarchical rules: initiation of teacher-learner dialogue (decrease in strength with decrease in social class)	☐ 3b.classification of teacher-learner time
○ 7a.strong macro-level selection (✓)	× 1d.classification of discourses (exposure to 'institutions of consecrated art such as galleries)	■ 6e framing of hierarchical rules: control of work focus (decrease in strength with decrease in social class)	☐ 6a.framing of hierarchical rules: entry to/exit from the classroom
○ 7c.strong framing of micro-level selection (selection of sources of reference) (✓)	× 4a.classification of learner-learner space	■ 6f.framing of hierarchical rules: control of sound levels (decrease in strength with decreasing social class)	☐ 6c.framing of hierarchical rules: regulative mode
○ 8b.strong micro-level sequencing (✓)	× 4b.classification of learner-learner materials		☐ 8a.framing of macro-level sequencing (sequencing between projects)
○ 10a.strong framing of evaluation criteria (clarification of criteria through extension) (✓)	× 9a.framing of macro-level pacing (amount of work produced)		
• **pedagogic features associated with all high-achieving school classes and absent/ rarely present for lower-achieving school classes (see first phase of analysis and Table 20)**	× 9b.framing of micro-level pacing (learners' day-to-day pacing through the phases of individual projects)		
• 3a.weak classification of teacher-			

learner space • 6b.weak framing of control of communication-relations (opening of communication relations by the teacher: contribution-beyond-the-minimum by learners) • 7b.weak framing of micro-level selection (selection of components, such as subject matter, media, and use of formal elements within projects) • 10b.very strong framing of evaluation criteria (clarification of criteria through elaboration) • 11.high levels of content (requirements for engagement with metaphor)			

PEDAGOGIC FEATURES ASSOCIATED WITH HIGH ACHIEVEMENT AND ALIGNED JUDGEMENTS

- • pedagogic feature associated with all high-achieving school classes and absent/ rarely present for lower-achieving school classes (see first phase of analysis and 'Table 2')
- ○ pedagogic feature associated with all high-achieving school classes and all or most lower-achieving school classes (see first phase of analysis and 'Table 2')
- ■ pedagogic feature varied across high-achieving classes ; variation follows social-class pattern (see third phase of analysis and 'Tables 3 and 4')
- ☐ pedagogic feature varied across high-achieving classes; no clear pattern in variation (see third phase of analysis and 'Tables 3 and 4'), but weakly associated with achievement/ associated with achievement in the top two classes (see fourth and fifth phases of analysis and 'Tables 6, 7, and 8')
- × pedagogic feature varying uniformly or roughly with social class regardless of achievement level of school class (see second phase of analysis and 'Table 3')
- ✓ pedagogic feature associated with high percentage grades and aligned aesthetic judgements (see 'Table 8')

Table 25: Comparison of pedagogic features in the high- and lower-achieving school classes within each social class group

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3A	4	4	3	4	1	1	1	2	3	3	4	1	2	2	3	4	4	4	1	4	4	4	4	3	4	4	4
3B	3	4	3	4	3	1	2	4	3	4	2	2	3	3	4	4	3	4	2	3	3	3	3	3	3	3	3
Similar/ mixed C/F	s	s	s	s	m	s	m	m	s	s	s	s	m	s	s	s	s	s	m	s	s	s	s	s	s	m	m

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
2A	3	3	1	3	1	3	2	3	3	2	4	3	2	3	3	4	3	3	1	4	4	3	4	4	4	4	4
2B	3	2	2	3	3		3	3	2	2	3	2	3	1	3	2	1	4	3	3	4	2	2	3	3	2	2
Similar/ mixed C/F	s	m	s	s	m	m	m	s	m	s	s	m	m	m	s	m	m	s	m	s	m	s	m	s	s	s	m

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
1A	4	1	2	2	1	2	2	2	1	1	2	1	2	2	2	2	4	1	3	3	3	2	2	3	4	3	
1B	2	2	1	1	1	2	2	3	2	1	4	3	3	2	4	3	3	4	2	2	3	3	2	1	3	2	4
Similar/ mixed C/F	m	s	s	s	s	m	m	m	s	s	m	m	m	s	m	m	m	s	s	m	s	s	s	s	s	m	s

Table 26: Fit of within-social-class patterns with the four groups of pedagogic features, and 'new' pedagogic features associated with achievement in two of three social class groups

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
Fit of patterns in Table 26 with four groups of pedagogic features in Table 25	1	2	2	2	1	new	1	new	2	2	3	new	1	new	3	3	3	1	1	1	new	1	2	2	1	1	1

*

Table 27: Pedagogic features in the two highest-achieving schools 3A and 1A

	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3A	4	4	3	4	1	1	1	2	3	3	4	1	2	2	3	4	4	4	3	1	4	4	4	3	4	4	4
1A	4	1	2	2	1	2	2	2	1	1	2	1	2	2	2	2	1	4	1	3	3	3	2	2	3	4	3
Fit of pedagogic features in top two achieving schools, with groups of pedagogic features in Table 25	1	2	2	2	1	new	1	new	2	2	3	new	1	new	3	3	3	1	1	1	new	1	2	2	1	1	1

*LEGEND:

SCHOOL CLASSES:

3A=school class high in social class, high-achieving; 3B=school class high in social class, low-achieving

2A= school class medium in social class, high-achieving; 2B=school class medium in social class, low-achieving

1A=school class low in social class, high-achieving; 1B =school class low in social class, low-achieving

CLASSIFICATION AND FRAMING VALUES

1=very weak C/F, very low content level; 2=weak C/F, low content level; 3=strong C/F, high content level; 4=very strong classification/ framing/ very high content level

CLASSIFICATION OF DISCOURSES:

1a=classroom displays; 1b=stored visuals; 1c=references to consecrated art; 1d=gallery exposure; 1e=exposure to art history; 2=art 'languages'

CLASSIFICATION OF SPACE: 3a=teacher-learner space; 3b=teacher-learner interaction time; 4a=learner-learner space; 4b=learner-learner materials

CLASSIFICATION OF AGENTS: 5= degree of differentiation of learners

FRAMING OF REGULATIVE DISCOURSE

6a=entry to/ exit from the classroom, 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound

FRAMING OF INSTRUCTIONAL DISCOURSE

7a=macro selection; 7b=micro selection (of components within projects); 7c= micro selection (of sources of reference); 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing; 10a=explication of evaluation criteria via extension of learner selection; 10b=explication of evaluation criteria via elaboration of criteria

ADDITIONAL FEATURE: 11=instructional content

s=classification and framing values of pedagogic features similarly strong/ weak *between* high- and lower-achieving classes *within* social class groups

m = classification and framing values of pedagogic features different for high- and lower-achieving school classes *within* social class groups

1='GROUP 1' pedagogic features, associated with achievement for all learners (see Table 25)

2='GROUP 2' pedagogic features, varying with social class and not achievement (see Table 25)

3='GROUP 3' pedagogic features, for which different classification/ framing values were associated with achievement for learners in different social positions (see Table 25)

4= 'GROUP 4' pedagogic features, not associated with achievement or social class (see Table 25)

new='new' pedagogic feature associated with achievement in two of three top-achieving- and the two highest-achieving schools

Table 29: Pedagogic features of school classes ranked on the basis of numbers of learners with aligned judgements within them

School class	% of learners with aligned judgements	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
3B	81%	3	4	3	4	3	1	4	4	3	4	3	2	3	2	4	4	3	4	3	3	3	3	3	3	3	2	2
2A	81%	3	3	1	3	1	2	2	3	3	2	4	2	2	2	3	4	3	3	1	4	1	3	4	4	4	4	4
3A	79%	4	4	3	4	1	1	1	2	3	3	4	1	2	2	3	4	4	4	1	4	4	4	4	3	4	4	4
1A	73%	4	1	2	2	1	2	2	2	1	1	2	1	2	2	2	2	1	4	1	2	2	3	2	2	3	4	3
2B	71%	3	2	2	3	3	1	3	3	2	2	3	2	3	1	3	2	1	4	3	3	4	3	2	3	3	3	2
1B	63%	2	2	1	1	1	3	3	3	2	1	4	3	3	3	4	3	3	4	2	2	3	3	2	1	3	2	1

LEGEND:
SCHOOL CLASSES:
3A=school class high in social class; high-achieving
2A=school class medium in social class; high-achieving
1A=school class low in social class; high-achieving
3B=school class high in social class; lower-achieving
2B=school class medium in social class; lower-achieving
1A=school class low in social class; lower-achieving
CLASSIFICATION AND FRAMING VALUES
1=very weak classification/ framing/ very low content level
2=weak classification/ framing/ low content level
3=strong classification/ framing/ high content level
4=very strong classification/ framing/ very high content level
CLASSIFICATION OF DISCOURSES:
1a=classroom displays; 1b=stored visuals; 1c=references to consecrated art; 1d=gallery exposure; 1e=exposure to art history; 2=art 'languages'
CLASSIFICATION OF SPACE:
3a=teacher-learner space; 3b=teacher-learner interaction rate; 4a=learner-learner space; 4b=learner-learner materials
CLASSIFICATION OF AGENTS
5=degree of differentiation of learners
FRAMING OF REGULATIVE DISCOURSE
6a=entry to/ exit from the classroom; 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE
7a=macro selection; 7b=micro selection (of components within projects); 7c=micro selection (of sources of reference); 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing
10a=explication of evaluation criteria via extension of learner selection; 10b=explication of evaluation criteria via elaboration of criteria
ADDITIONAL FEATURE 11=instructional content
1,2,3,4=pedagogic features associated with high numbers of learners making aligned judgements in the current analysis and not always associated with high percentage grades in earlier parts of the analysis
1,2,3,4=pedagogic features associated with high numbers of learners making aligned judgements in the current analysis and high percentage grades in earlier parts of the analysis

Table 30: Synthesis of patterns: pedagogic features associated with learners' high percentage grades and aligned aesthetic judgements

Pedagogic feature	1a	1b	1c	1d	1e	2	3a	3b	4a	4b	5	6a	6b	6c	6d	6e	6f	7a	7b	7c	8a	8b	9a	9b	10a	10b	11
Categorisation of pedagogic feature	○ ✓	×	×	×	○	□	●	□	×	×	■	□	●	□	■	■	■	○ ✓	●	○ ✓	□	○ ✓	×	×	○ ✓	●	●

LEGEND:
PEDAGOGIC FEATURES ASSOCIATED WITH HIGH ACHIEVEMENT AND ALIGNED JUDGEMENTS
○ particular form of pedagogic feature associated with all Art teaching
✓ particular form of pedagogic feature associated with high percentage grades and aligned aesthetic judgements for classes in all social positions
● particular form of pedagogic feature associated with high percentage grades for school classes in all social class groups
□ particular form of pedagogic feature associated with high percentage grades in top two classes
■ pedagogic feature varies in association with high percentage grades, variation follows social-class pattern
× pedagogic feature varies with social class regardless of achievement level of school class
SCHOOL CLASSES:
3A=school class high in social class, high-achieving; 3B=school class high in social class, low achieving
2A=school class medium in social class, high-achieving; 2B=school class medium in social class, low-achieving
1A=school class low in social class, high-achieving; 1B=school class low in social class, low-achieving
CLASSIFICATION AND FRAMING VALUES
1=very weak classification/ framing/ very low content level
2=weak classification/ framing/ low content level
3=strong classification/ framing/ high content level
4=very strong classification/ framing/ very high content level
CLASSIFICATION OF DISCOURSES:
1a=classroom displays; 1b=stored visuals; 1c=references to consecrated art; 1d=gallery exposure; 1e=exposure to art history; 2=art 'languages'
CLASSIFICATION OF SPACE:
3a=teacher-learner space; 3b=teacher-learner interaction time; 4a=learner-learner space; 4b=learner-learner materials
CLASSIFICATION OF AGENTS
5=degree of differentiation of learners
FRAMING OF REGULATIVE DISCOURSE
6a=entry to/ exit from the classroom; 6b=control of communication; 6c=regulative mode; 6d=initiation of teacher-learner dialogue; 6e=control of work focus; 6f=balance of sound
FRAMING OF INSTRUCTIONAL DISCOURSE
7a=macro selection; 7b=micro selection (of components within projects); 7c=micro selection (of sources of reference); 8a=macro sequencing; 8b=micro sequencing; 9a=macro pacing; 9b=micro pacing; 10a=explication of evaluation criteria via extension of learner selection; 10b=explication of evaluation criteria via elaboration of criteria
ADDITIONAL FEATURE
11=instructional content

CHAPTER 7

CONCLUSIONS

This concluding chapter gives a brief overview of the thesis and considers its limitations. It then examines the research in relation to underpinning theoretical frameworks, in particular Bernstein's theory of pedagogy. Pedagogy associated with achievement in art is described and considered in relation to literature within which it was positioned. The chapter concludes by suggesting possible implications of the research for teacher training and arts education policy.

7.1. Overview of the thesis

This dissertation reports on the conduct of a sociological investigation into pedagogy associated with high achievement in art in the final year of secondary school. It explores first, achievement patterns in relation to social class, race and gender. Finding distribution of final exhibition grades most strongly patterned in relation to social class (and decreasing with the decrease of class), it asks whether or not specific pedagogic features are associated with high achievement by learners in different social positions. To address this question it does two things.

First, the thesis investigates the concept of achievement in art. The latter, given the broadness of definitions of art and art curricula, and potential subjectivity in the judgement of art, required delineation of processes and results of artistic judgement in operation at schools in the study. Achievement in art is defined in terms of learners' percentage grades and the degree to which their artistic judgements are aligned with those of their evaluators.

The thesis secondly compares pedagogy in three pairs of school classes, those in each pair being socially similar but achieving at different levels. Social class in the three pairs of classes is on average 'low', 'middling' and 'high' respectively, making possible comparison of pedagogy associated with high achievement across social levels. Pedagogy linked to achievement in Art is compared to that associated with success in Science.

7.1.1. Art at school and beyond

The first chapter discusses the observation of art curricula at secondary schools, issues identified in relation to the teaching of art, and the origins of the research.

At schools in the sample the emphasis was on art for its own sake and art potentially developing learners' aesthetic sensibilities and creative, perceptual, cognitive, reflective capacities. Art afforded aesthetic experiences through engagement with processes and products, acquisition of technical skills, and development of what Elfland (2004a) terms "imaginative cognition". The latter could be described as development of the imagination not in a romantic sense as creative self-expression, but as Elfland's (2004b) "cognitive flexibility" where individuals are encouraged to develop skills to construct meaning by mapping known ordered experiences onto different domains.

Art at schools observed in the study also potentially prepared learners for post-school art-related careers and, since roughly half of learners taking art as a school subject expressed intentions to pursue such careers, this role of school art was important for equipping the learners to follow pathways of their choosing.

Exploration of criteria for entrance to tertiary-level art courses revealed that acceptance onto courses was based on assessment of demonstrated skills. While assessment of the latter skills was largely non-verbal, it was often expressed in terms of degrees of talent. When pressed in interviews however, members of selection committees described 'talent' in terms of relatively specific – and thought to be teachable – skills.

As an art teacher over a number of years I observed that at some schools whole classes had relatively high levels of skill, while in others skills ranged from very high to very low levels. There also appeared to be higher levels of skill in socio-economically advantaged than in disadvantaged contexts. I decided to investigate schools across a range of economic contexts, including those with overall and varying skill levels.

In this exploration several issues required exploration namely, observable differences in productions between schools; lack of specific criteria in curriculum documents and how teachers proceeded in the absence of such guidance, the generally acknowledged subjectivity in the judgement of art and how this subjectivity was taken in to account in the grading of final-year art exhibitions.

7.1.2. Location of the current study

I have located the study in terms of debates on learner achievement in relation to social context and pedagogy. This location, and theoretical frameworks informing conceptions of social class, pedagogy, knowledge, art and art curricula, and achievement in art, forms the basis of the second chapter.

There is general acknowledgement in the literature, of the over-riding effects of contextual factors such as social class, on learner achievement. Justification for the focus on pedagogy in relation to success in the current study is based on findings that socially similar school classes achieve at varying levels (see for example Reynolds and Creemers 1990:1; Demack et al 2000: 120; Teddlie and Reynolds 2000: 168; Vinjevold and Crouch 2001; Van der Berg and Burger 2003). While reasons for this varying achievement could be managerial or resource-based, they are also partially unexplained (Vinjevold and Crouch 2001; Taylor et al 2003; Van der Berg and Burger 2003). In the present research I posit that achievement is affected by pedagogy and test the hypothesis by exploring associations of specific pedagogic features with achievement, acknowledging the significance of context by comparing only socially similar school classes.

Pedagogy has been variously described. Of significance for the current research is general support in the literature, for hybrid teaching styles made up of mixtures of traditional and progressive pedagogy (see for instance Bennett 1976, Ramsay and Ransley 1986, Weinert et al 1990, Westerhof 1992). There are two limitations to these findings for the present study, the first being that contextual features are not taken into account: pedagogy is assumed to affect all learners similarly. The second is that pedagogic features are not analysed at a level of generality sufficient to permit comparison between studies.

I position the present investigation in a cluster of studies in which achievement is considered in relation to learners' social contexts, and pedagogy conceived at a level of abstraction applicable to any transmission-acquisition process. The latter level of generalisation is facilitated by Bernstein's (1971; 1975a; 1975b; 1981; 1996; 1999; 2000b) theory according to which pedagogy is described in terms of power and control relations, the former denoted in terms of the degree of specialisation of categories, and the latter in terms of the locus of control of actions and communications. Any pedagogic features, instructional and regulative (conduct-related), can be described in terms of degrees of power and control and thus compared.

Studies utilising Bernstein's theory in the ways used in the present research, conducted principally in Portugal, have found that pedagogy with specific power and control relations is consistently associated with high levels of achievement in science, and that slightly differing power and control relations benefit learners in different social positions (see for example Morais et al 1995). The current study by focusing on whether or not specific pedagogic features are consistently associated with high achievement in art for learners in different social positions in South Africa and on how power and control can be strengthened or weakened in the transmission-acquisition process hopes to build on the Portuguese research.

Art as a form of knowledge (unlike science in which new knowledge is integrated into increasingly general propositions), accumulates serial, non-translatable, non-comparable "languages" (Bernstein 1996 and 2000b) or approaches to creative activity. There are in other words, different views on what constitutes art in general and desired secondary school art curricula in particular. School curricula, although amenable to shaping by social and economic trends, arguably have core values intrinsic to art.

Secondary school art in the region of South Africa in which the current research has been conducted is located broadly within the Western European tradition. The broadness of this tradition and the vagueness of the official syllabus (Western Cape Education Department 1995) make differences between curricula across schools possible. In order to establish the existence or otherwise of shared criteria and access

to these criteria by different groups of learners, it has been necessary to interrogate pedagogy, what constitutes high achievement in the context studied, and processes by means of which this is decided.

7.1.3. Trends in final-exhibition grades, and selection of case study sample

Investigating association of specific pedagogic features with high achievement levels in art by learners in particular social positions required prior exploration of the existence or otherwise of trends in art achievement patterns: social patterning of achievement could not be assumed. The current research thus has two parts: an initial survey of patterns in learners' percentage grades in relation to their social class, race, and gender; and a multiple case study for detailed investigation of pedagogy and achievement. Time constraints meant that the case study sample was chosen on the basis of initial survey patterns, the latter receiving post-hoc confirmation over four successive years concurrently with detailed investigation. This design, the subject of Chapter 3, has an 'ex post facto' logic: detailed study focuses on features that might have had an effect on percentage grades already achieved by learners.

The survey sample was purposively chosen from the available population, consisting of final-year school classes in a region sharing a single moderator, and having been taught by the same teacher for at least three years. Choice of a single moderator was important, given that final exhibitions were moderated by teams of art teachers and the moderator's task was to ensure consistency across schools. Further, moderators, being experienced art teachers and curriculum planners, were able to articulate differences between contexts. Attempts were made to include classes varying with respect to social rank, performance levels, and differing observably with respect to race. Cohorts of final year learners were surveyed over four consecutive years at the same schools, achievement trends being ascertained initially using 254 learners in the first year of the study, and patterns confirmed using all 763 individuals after four years.

There was only a small difference between the mean grades of male and female learners, rendering gender of minor importance in attempting to control for social factors potentially affecting achievement.

Learners' racial groups were associated with variation in mean grades to a degree: there were no practically significant differences between the mean grades of different groups, but small to medium differences between those classified 'white', and those classified 'coloured', 'black', 'Indian' or 'Asian' – 'white' learners achieving at higher levels. Since the sample was dominated by learners characterised as white or coloured and differences between these groups were the largest pertaining to race in the sample, an attempt was made to control for race when selecting the sample for detailed study. This attempt was however secondary to controlling for social class which was the most significant contextual feature outside of school.

Some aspects of social class were associated with achievement. When using Wright's (1997) typology to analyse social class-based variation in learners' mean grades, two patterns of note emerged. First, some aspects of social class made no difference to learners' mean grades: neither breadwinners' "capitalist" (employer-employee) status nor position in the authority hierarchy was linked to differences in learners' mean grades.

Second, analyses showed that learners' mean grades varied in relation to breadwinners' education levels. The mean grades of learners of all employee breadwinners with university degrees were considerably higher than those linked to breadwinners with moderate education levels and significantly higher than those associated with breadwinners with low skill levels.

Given the association of parental education and learners' grades, relations between these features were investigated using all 763 surveyed learners. Although mean grades decreased with lowering of parental education, the only significant difference was between the grades of learners with degreed (Category G) breadwinners and those of learners with breadwinners with some of secondary school (Category C) education. Differences between grades associated with the two highest parental education levels (Categories G and F) were small, and between the highest (G) and moderate education levels (D and E), medium-sized. Only one group did not fit the pattern: although the mean grade linked to the highest parental education levels (G) was higher than the mean grade linked to the lowest education levels (A and B), the

difference between the two grades was smaller than expected. Reasons for the size of this difference are not known.

Statistical evidence could be said to support the perception that the higher the social class, the higher learners' mean grades, the particular aspect of class of importance in this instance being education levels of breadwinners. As a result, breadwinners' education levels formed the basis upon which the case study sample was selected.

Six school classes were selected for case study, one high- and one lower-achieving class at each of three social class levels, this number being sufficiently small for detailed data gathering and large enough to permit some generalisation. This sample was constructed to reveal relations between pedagogic features, social class, and achievement, through conceptually clustered matrix analyses (Miles and Huberman 1994: 127). The scheme, although dealing with associations rather than causes, fits Cohen and Manion's (1980: 145) "criterion-group" ex post facto approach in which the goal is to discover possible causes for phenomena by comparing subjects for which the variable is present, with similar subjects for whom it is absent. Socially similar school classes constitute criterion groups, those in each pair differing with respect to possession of the dependent variable, high percentage grades.

Selection of the three pairs of classes was based on two principles. First, although it was not possible to control their social composition, classes had to be reasonably socially similar over a period of four years, in terms of parental education levels and especially proportions of breadwinners with university degrees, and race categorisations. The second principle was that the mean grade in one class in each pair had to be practically significantly higher than that in the other, for four consecutive years.

7.1.3.1. The three pairs of classes

Mean grades of school classes 3A, 2A, and 1A were significantly higher than those of classes 3B, 2B, and 1B. Associated main breadwinners in 1A and 1B had the lowest average education levels in the sample. Both classes included some parents with some or all of primary school as their highest education level, and had large proportions of learners classified as 'coloured'.

Classes 2A and 2B were paired for associated breadwinners' 'middling' average education levels. Both classes had small numbers of breadwinners with degrees and very low numbers with some or all of primary school as their highest education level. A large proportion of learners in both classes were classified 'coloured'.

Classes of teachers 3A and 3B had the highest breadwinner education levels in the sample, and high proportions of learners classified as 'white'. They were thought sufficiently similar despite 3A being at a prestigious art centre and 3B at a state school. The context of 3A with its large library, exhibition spaces and visible range of art activities on offer had advantages over most state schools, but learners of 3B had use of a judiciously selected library with a wide range of up-to-date books and videos, were offered two well-supported art specialisations, were regularly shown cutting-edge exhibition information and taken to galleries, and the Art rooms and school were generally professionally equipped.

7.1.4. Achievement in art: judgement, recognition and realisation

Achievement, examined in relation to macro-social features and micro-level aspects of pedagogy, was expressed in terms of Bernstein's (1996 and 2000a) concepts of "recognition" and "realisation". Relatively simple measures of learners' recognition and realisation were required to facilitate comparison between learners in different social class groups on one hand, and school classes on the other. Measurement of these aspects of achievement necessarily began with the question as to what was being recognised and realised, which, given the lack of universal and explicated criteria, and play of subjectivity in the judgement of art, was a matter for investigation. Delineation of this exploration forms the fourth chapter.

Attempts were made to establish the existence of generic sought-after criteria through interviews with teachers, moderators, and members of tertiary-institution admission-committee members. Three broad areas of commonality emerged with respect to criteria: originality or individuality of style, technical skill, and exploration of 'content' or ideas. Although existence of these features was useful for clarification of the form of current art curricula and pointed to the need to assess multiple features

when judging artworks, they were too complex for use in a recognition task and simplification of axes of judgement was required.

It was decided to use 'drawings from life' to test recognition as these drawings were firmly located within a widely recognisable tradition and relatively simple, requiring a narrow judgement focus on technical skill. Further, while maintaining their status as genuine artworks, life drawings could be used to create a relatively standardised range of images for comparison.

A recognition instrument with which learners were required to rank two sets of five pencil drawings according to sought-after features displayed in the images, was created. The instrument was initially administered to teachers and moderators in the study with the aim of creating a stable set of judgements against which learners' recognition could be measured. When it emerged that rankings were not uniform respondents were interviewed and asked to give reasons for their rankings.

7.1.4.1. Shared criteria

Evaluators' responses to the ranking task revealed the emergence of broad patterns in the ordering of both sets of drawings. There was almost unanimity in rankings of the first set of images (A1, A2, A3, A4, and A5): all teachers and moderators always placed two specific drawings in the first two positions and almost always put two specific others in the following two places. Ranking of the second set of images (B1, B2, B3, B4, and B5) was more varied, with only two thirds of evaluators placing two specific images in the first two positions and two specific others in the following two places.

While at first surprising, variation in patterns was explained by reasons given for rankings. Placing of the top two images appeared to involve discrimination between different types of advanced skills, while positioning of the second two drawings seemed to involve judging levels of skill. Privileging of different features underlay different rankings. Features privileged in the first set of drawings were either "a sense of form", or "texture and originality". These as well as "decorativeness" were mentioned in relation to the second set of images – the additional feature probably accounting for increased variety in judgement.

The broadness of ranking patterns remained despite efforts to narrow the judgement focus to technical competence. This breadth is perhaps a function of the horizontality of art as a knowledge structure: a sense of form is privileged in the classical tradition; texture or manipulation of pictorial surfaces, and originality, are modernist concerns; decoration has a place in design. These qualities, 'speaking' different languages or conceptions of art, feature together and are privileged to differing degrees, in teachers' judgements of learners' artworks. The variety in judgement patterns on one hand shows the limits of disciplinary closure. On the other hand broad similarities of judgement – the fact that judgements of all moderators and teachers of high-achieving classes, as well as the judgments of most other teachers follow a broad pattern suggests communal values.

7.1.4.2. Learners' recognition and realisation of shared criteria

Measures of learners' ability to recognise sought-after criteria were obtained by comparing their rankings of drawings in the task with the corresponding rankings of their evaluators[33]: orderings were designated 'aligned', 'partly aligned' and 'non-aligned'.

Moderated percentage grades awarded for final exhibitions, being the only marks awarded by more than single individuals, were taken as measures of learners' realisation or ability to produce required texts. Grades were designated 'low' if under 60%, this value being a minimum indication for possession of basic technical skills; 'average' if between 60% and 80%; or 'high' if over 80%, the minimum required for display of originality or consistent individual style, high levels of technical skill and exploration of ideas.

Analysis showed an indirect relation between possession of recognition and realisation rules: some learners could produce sought-after texts (they were awarded high percentage grades) without making aligned judgements (recognising sought-after criteria). Separate analyses were thus made to ascertain which pedagogic features were associated with achievement of these two competences.

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[33] Evaluators ranking drawings in the task comprised all five moderators in the study and all eight of 14 teachers in the initial sample still teaching at schools approached at the start of the study.

7.1.5. Developing an external language of description for pedagogy

Positioning the study in the mode of earlier work associating specific pedagogic features and the achievements of socially particular learners (for example Domingos 1987; Morais et al 1992 and 1995; Morais and Pires 2002) meant use of accompanying theoretical frameworks (Bernstein 1971; 1975a; 1975b; 1981; 1990; 1996; 1999; 2000b) or internal language of description (Bernstein 1996: 135) and commensurate empirical descriptions or external language, whereby the internal language was used to describe something outside itself.

Qualitative data were needed to describe pedagogy in terms of classification of 'discourses', 'space' and 'agents', framing of regulative discourse (control of conduct) and the selection, sequencing, pacing and evaluation criteria of instructional discourse. On the other hand, given that the salience of features was not known at the start of the research, attempts were made to capture the richness of activity and interaction in art classes as fully as possible. Various data-gathering methods were used including classroom observation and the making of field-notes, audio-recording teacher-learner dialogue, interviews and informal dialogues with teachers and learners. Standard sized segments of representative text were selected for analysis.

Pedagogy was analysed in terms of Bernstein's (1996; 2000b) concepts of power and control. Features in selected data were grouped into categories adapted from previous research (Morais 2002a), and new categories were made where necessary. Each pedagogic feature was assigned one of four degrees of strength. Power and control relations were designated 'very strong', 'strong', 'weak' and 'very weak' when the former categories varied from being highly to weakly distinct, and the latter strongly to weakly controlled by the teacher. In all, twenty-seven pedagogic features were used in the analysis of relations between pedagogy and learners' social class, and recognition and realisation of sought-after texts.

7.1.6. School classes compared

Tests were performed to ascertain comparability between the mean grades of school classes, social class groups, and achievement groups over the four years of the study. Results showed that mean percentage grades were similar within school classes and

that ranking of schools based on differences in mean grades between classes was similar over the four years of the research. There were consistent clear differences in the same direction regarding the mean grades of learners in 'high', 'medium' and 'low' social-class groups, and the 'high' and 'low' achievement groups. Since patterns in learners' mean grades were consistently maintained over four years, it was possible to consider exploring whatever it was that was enduring.

Since achievement did not run in accordance with privilege, social class could not be said to be preserving the ranking pattern. Since there was however a relation between social class and achievement when the grades of all 763 surveyed learners were considered, the possibility existed that pedagogic practise was intervening to produce achievement trends across cohorts of learners. Importantly: if pedagogies associated with high-achieving learners in different social class positions were found to be similar to each other and different from those experienced by lower-achieving classes, the ranking patterns would comprise evidence of the stability of pedagogy over time.

Relations between percentage grades, pedagogic features, and the social class of learners were analysed by comparing the six school classes in five ways:

- First, pedagogy in the three high-achieving classes was compared with that in the lower-achieving classes, to ascertain whether specific features were associated with achievement for all learners
- Second, pedagogy experienced by the three social class groups was investigated to see if any features were patterned with respect to social class
- Third, pedagogy within high and lower-achieving groups was respectively examined for social class patterns, to investigate features associated with high achievement for different social class groups
- The fourth part of the analysis explored similarities and differences between high and low achieving school classes in each of the 'high', 'middle' and 'low' social class pairs. This exploration was useful for identifying features associated, but less strongly so than others already identified, with high percentage grades for all learners

- Fifth, analysis was made of pedagogic features associated with high numbers of learners making aligned judgements

7.2. Pedagogy associated with achievement in art

7.2.1. Pedagogic features associated with high percentage grades for all learners

Achievement of high percentage grades in art by all learners was found to be linked to high levels of conceptual demand (complex content, or teachers' expectations that learners engage with ideas and visual metaphor) and explication of shared criteria, and pedagogic features expected to facilitate these characteristics. The features included strong classification of discourses or provision of exemplars of consecrated art primarily through classroom displays, and macro- and micro-level teacher-selection of projects and sources of reference respectively. Also included were open teacher-learner communication relations, thought to further explication of sought-after criteria through teachers' extension of learners' ideas and productions, a process narrowing the possibilities of interpretation by learners. Another associated feature, thought to enhance the openness of communication, was weak classification or blurring of teacher-learner spaces.

Other features linked to high achievement were thought to provide manageable 'steps' towards sought-after criteria. These features included strong micro-level teacher-control of the sequencing of the stages within projects as well as open communication relations, both of which appeared to scaffold learners to further stages of production and without which reaching further stages seemed improbable.

An additional feature linked to achievement of high percentage grades, namely weak framing or learner-driven micro-level selection of components within projects, was thought to have consequences for both commitment to work and the fostering of individuality.

7.2.2. Pedagogic features associated with high percentage grades for learners in different social positions

High achievement for learners in high social class positions was also associated, in addition to features linked with success for all learners, with strong classification or

differentiation of learners, and strong teacher-control of initiation of dialogue, work-focus, and sound levels. The transmission-acquisition process in these classrooms appeared 'businesslike', teacher-controlled and individualised.

In contrast, high achievement for learners in low social positions was linked to weaker classification and framing of these features, rendering conduct-related discourse 'relaxed' with extensive spontaneous teacher-learner and learner-learner group interaction.

None of these businesslike or relaxed characteristics mediated against the collegial interaction mode present in all high-achieving classrooms and may have served to facilitate this mode as well as other features associated with achievement. The possibility exists that different forms of conduct-related discourse, rather than not mattering, were required, to facilitate specific communication modes (in this instance collegial relations) suited to particular curricular objectives (in this case exploration and depiction of ideas).

7.2.3. Pedagogic features associated with aligned aesthetic judgements

The making of aligned judgements was linked to two clusters of pedagogic features. The first, namely, strong explication of criteria, consecrated displays, teacher-selection of projects and references, and teacher-control of sequencing of processes within projects, is also associated with high percentage grades for all learners.

The second group of features linked to the making of aligned judgements was associated with high percentage grades for learners in high social class positions and not for those learners in lower positions. This group of features included strong classification of discourses in the form of stored visual materials, gallery visits, and reference to consecrated art; strong classification of learners in terms of differentiation and space; and strong teacher-controlled conduct-related features of initiation of dialogue, work-focus, and sound levels. High achievement for learners in low social positions was linked to weakly framed forms of these features.

Pedagogy linked to high percentage grades differed from that associated with learners' making of aligned judgements, the latter being more strongly classified and framed.

For the pairs of school classes with 'middling' and 'low' social class, pedagogy associated with high percentage grades was also linked to high numbers of learners making aligned judgments. For the pair of classes high in social class however, pedagogies associated with high percentage grades on one hand, and high numbers of learners making aligned judgments on the other, differed. The difference between the pedagogies most likely to have facilitated higher numbers of learners making aligned judgments in the class with the lower percentage grades is the presence of History of Art. It is difficult to see how other differences between the pedagogies such as differences in use of space or communication relations would have assisted the making of aligned judgments.

7.2.4. Pedagogic features linked to social class and not achievement

Some features varied with social class irrespective of learners' achievement levels: these were control of pacing, classification of space and use of materials between learners, and some ways in which discourse was classified (stored visual materials; references to consecrated art; gallery visits).

7.3. Pedagogy associated with achievement in art and science

Pedagogic features found to be associated with achievement in art were for the most part similar to those linked in the literature to achievement in Science (Morais et al 1995; Morais and Pires 2002). Four differences emerged. First, while learner spaces were weakly bounded in high-achieving Science classrooms, they varied in high-achieving art classrooms, being more strongly classified in upper than lower middle class contexts. This variation could be due to the fact that while in Science lessons learners were collectively investigating existing phenomena in the objective world, in Art classes they were creating individual responses to project requirements: weak classification may have been necessary in contexts with scarce resources but would not otherwise be associated with individualised work.

A second set of features differing between science and art classes was control of micro-level selection. In high-achieving classes in both disciplines there was overall teacher-control of selection, but whereas in science contexts there was micro level choice of examples, in art settings learners selected components within projects but teachers vetted learner-selected sources of reference. It is posited that, while science is a strong knowledge structure and learners could be expected to recognise examples, the weaker structure of art made teacher-controlled navigation of selections essential.

Sequencing also differed between high-achieving art and science classes. Strong macro level together with weak micro-level sequencing of concepts and lessons respectively, were linked to achievement in science (Morais et al 1995: 14). In art, strong macro-level sequencing or the ordering of simple and complex projects was important but less so than in science, occurring in only two of three top-achieving classes. Unlike with science, strong micro-level sequencing was associated with achievement in art. Strong micro-level sequencing constituted following teacher-set procedures, often consisting of phases of learner-doing interspersed with teacher-learner discussion of what learners had done, in order. It is likely that following sequences of procedures facilitated teachers' steering of learners towards the meeting of evaluation criteria, by opening the creative process to guidance at critical points. Strong micro-level sequencing was most marked in the top two classes in the study.

Lastly classification of agents, a feature described in terms of the degree of hierarchy between teachers and learners in the science literature and strong in high-achieving classes (Morais et al 1995: 15; Morais and Pires 2002: 4), was defined in relation to hierarchies between learners in the current study. Strong classification or separation of individual learners from each other was associated with achievement in art by learners in high social positions, and some weakening of these relations with the success of those in lower positions. It is thought that teachers' allowing or encouraging group participation in discussion may have opened communication relations for these learners.

7.4. The limitations of the study

Limitations of the research design were discussed in Chapter 3. These limitations and steps taken to address them are summarised here. Other criticisms are raised and the implications of these critiques for the research dealt with briefly. Criticisms relate to research methods and coding schemes used in the study, the focus of the study on art, and the particular focus within the art field.

The charges of lack of reliability and validity commonly levelled at case study methods have been addressed in the current research through use of continuous data (lesson transcripts); triangulation; and making explicit the principles and procedures for selection, coding and analysis of data. Coding procedures are outlined in detail in Chapter 5 and are open to interrogation by readers. A strategy was adopted to increase the reliability of coding procedures: other researchers were given samples of data and asked to code this information using the coding protocols. I compared the resulting coding values with my own characterizations and clarified protocols where necessary.

The largest difficulty for the research however, is the limits of its generalisability occasioned by use of case study methods. Use of multiple cases in the current study is an attempt to address this difficulty: three pairs of school classes rather than a single pair have been used for analysis of relations between pedagogic features and achievement in the expectation that patterns found in one pair might be repeated in the other two, potentially increasing generalisation. Further, cases have been selected on the basis of patterns found in the preliminary survey, each representing a particular social group.

Steps to increase generalisability by basing selection of cases on a survey and including six rather than a single case have resulted in a relatively large amount of data which, for a single researcher to replicate with time constraints, might prove problematic. Some depth has been sacrificed by including six rather than a single case or pair of cases, but ultimately similarities and differences between pedagogies revealed through comparison of the cases linked as they are to particular social groups are highly illuminating. Further, sacrifice of depth occurs in analysis rather than data collection, in that it was possible to select only a small proportion of texts for delicate

detailed analysis. Unanalysed data, being continuous, is available for further analysis at a future time.

The generalisability of case study methods rests primarily with their theoretical implications. However, the findings of the current research build on those of earlier research (see Morais et al 1992 and 1995, and Morais and Pires 2002), and analytic frameworks used could be used to analyse other cases and provide theory-based descriptions.

The current research shows pedagogy linked with high levels of achievement in art in the classes of three teachers, and the constancy of achievement associated with particular pedagogies over time and with different cohorts of learners. The fact that pedagogy linked to achievement in art is similar to that associated with success in science strengthens the argument that particular forms of pedagogy are linked to success. This is not to say that pedagogy associated with success will always carry a certain form: there are some differences in pedagogy linked to the successes of learners in different social and disciplinary contexts. Whether patterns found in the present research will be repeated for other disciplines and contexts – such as lower socio-economic groups than those included in the study – is a question for future research.

Coding data using Bernstein's (1996) code theory brought many advantages. It facilitated relation of the macro-social features of class and to a lesser extent race, and detailed micro-contextual aspects of pedagogy and individual learners' achievements. It was useful for categorising pedagogy in a systematic, generalised and replicable way, making comparison between pedagogies in different contexts possible. It made possible identification of different forms of pedagogy, and quantification of pedagogic features such that coding was testable by other coders. It was however very time consuming. Further, it is expected that although coding principles are applicable to pedagogy in a wide range of contexts, the level of delicacy of categories developed is highly specific to the arts: categories would require adaptation for use in other disciplines.

It is frequently argued that coding frames are inflexible and deterministic (see for example Harker and May 1993; 1995). I argue that this criticism is unfounded for the current research since the salience of particular pedagogic features was not known at the start of the research, and rich continuous data was collected on pedagogic practice. In addition, Bernstein's (1996) concepts of classification and framing, and operationalisation of these concepts in other studies (see for example Morais 1992 and 1995) opened the possibility of collection of information beyond that immediately visible, through interviews and questionnaires. Coding was only partly dependent on theoretical categories: all perceived features in the data were considered in their own right before being assigned to categories (see Section 7.5 below). Virtually all categories in the literature were developed as opposed to simply being adopted in the process of coding this data: coding categories for art classrooms were developed after much movement between theory, existing categories, and data gathered. Some of the data was not subsumable into adapted categories and new categories were devised. Thus, while coding frames were useful, the data shaped category-formation equally. Further, assigning data to theoretical categories lifted it to a level of generalisation making comparison between contexts possible.

Another possible criticism is the focus of the study on art, a subject with relatively low status in the curriculum and one which is perceived as having lesser importance for the world of work outside school than subjects such as the languages, mathematics, and science. I observed that art is often a 'dumping ground' for learners not coping with high-status subjects. Curricula in these contexts were usually devoid of history of art and art criticism. These absences were observed at lower middle class schools; at upper middle class schools art was often a prestigious subject including history of art and art criticism as well as practical work. Learners in these schools were often screened and selected for art classes on the basis of talent, skill and academic competence. The status of art is clearly relative, and the decision to research pedagogic practice in this context needs justification.

The charge of irrelevance regarding art in the world of work can be countered by pointing out that art encourages an ability to innovate, a quality frequently referred to as a necessity in the global world (see for example Muller 2000: 25-33). School art has specific relevance for the many tertiary-level courses and careers in design, for

which it directly prepares learners and into which over half of the learners in the study expressed intentions to enter. Entrance to such courses depends on successful performance in a portfolio of tasks designed to test learners' technical skills, ability to conceptualise ideas in visual form, and originality of vision. It is not difficult, given observable differences in tertiary-entrance portfolios and the overall pattern of art grades found in the present research, to form a perception that successful tertiary art students and artists commanding high fees for their work, art critics, mainstream tastemakers, designers of large corporate identities and the like, come from the ranks of the upper middle classes. Yet the current study has shown that if lower middle class learners have access to high-level art curricula at school, their exhibitions show qualities sought after in tertiary level entrance portfolios. I argue that the present research is warranted on two counts. First, it has been observed that pedagogy appears to make a difference to achievement in art (see section 1.1). Second, universal access to educational opportunity is part of social justice, and the present research seeks to show that pedagogic practice in art classrooms is a means of access to specialised art knowledge.

The focus in the current research on pedagogy linked to *achievement in art* is perhaps a limitation of the study as it does not foreground the broader social context of secondary school art in South Africa. It is a reality that very few senior secondary schools offer the disciplinary specialisation of art, and that schools doing so are those that historically served 'white' learners. While these schools are now racially mixed, further research is needed to explore institutional conditions blocking universal access to art as a senior secondary subject. It is expected however that the current study would have relevance in any context in which art is taught.

7.5. Reconsideration of theories used, in light of the research

7.5.1. The research and Bernstein's theory of pedagogic code

Bernstein's theories of pedagogic code and knowledge structures have been useful for the coding of pedagogy, and explanation of some of the features of art as a form of knowledge respectively. Use of the coding framework however led to the raising of some questions regarding the theory. The process for coding continuous data was difficult: categories used in literature to code pedagogy in science classrooms were extensively developed with considerable movement between theory and data, rather

than merely adopted for analysis of pedagogy in art classrooms. Many decisions were taken in the process, some of which are worth mentioning here.

While in science classrooms 'classification of discourses' concerns the degree of intrusion of 'everyday' into 'Science' knowledge, in art contexts the question arose as to what specialised fine art knowledge was selectively distanced from, and whether this distancing was from popular culture, design, or weak examples of art. In the coding process once all non-consecrated art had been grouped in opposition to 'consecrated fine art', care was taken to include as many potential sites at which classification could occur as possible, including classroom displays, teacher references to consecrated art, stored visual materials, visits to galleries, exposure to history of art, and teachers' vetting of learners' selections of reference material.

In the science literature, 'classification of agents' in high-achieving classes involves a strong teacher-learner hierarchy. In the current research it was assumed that there was always a strong teacher-learner hierarchy in observed art classrooms, and focus was placed on differentiation between learners. Consideration of several ways in which learners were distinguished was undertaken before the degree to which teachers engaged with individuals or groups was selected. Learner distinctions on the basis of levels of engagement with history of art, grades achieved, and commitment to the subject were discarded in the apparent absence of a relationship between these features and learner achievement.

One feature that could not be described using the concepts of classification and framing was the degree of complexity of projects or processes, the equivalent of content in strongly structured disciplines and termed elsewhere "the level of conceptual demand" (Morais and Pires 2002). This feature was factored into analysis in the present research as an additional feature.

Some questions arose in relation to Bernstein's distinction between instructional and regulative discourse, and definition of different types of regulative discourse. Distinction between instructional and regulative discourse was not always clear: teachers' conduct-related comments were at times directed towards learners' social behaviours, and at others, to instruction-content actions. All conduct-related

comments whether pertaining to Art-specific conduct or general social behaviours, were analysed in regulative terms.

Definition of types of regulative discourse was problematic. In the literature, framing of hierarchical rules is characterized as weak when the teacher does not indicate norms of social conduct previously established and uses personal appeals when students transgress the limits of norms (Morais and Neves 1997). Framing of regulative control is categorized as strong when teachers address transgressions with positional or imperative communications (Morais 2002a). When analysing regulative discourse in the current research, it was found that neither explication nor the leaving implicit of norms was necessarily coupled with inter-personal or positional communications: the degree to which comments were inter-personal or positional seemed to vary independently of the explication of norms. The two features needed to be examined separately in order to describe how they were combined by different teachers, and a more complex scheme of categorisation was developed.

An unexpected discovery was the existence of different types of regulative discourse, one directed towards the learner as person, the other to the learner as art-student. Incorporation of this distinction into the analysis resulted in description of different types of 'positional' comments: those made from the position of the teacher as a social authority in the institution of the school, and those made from the position of the teacher as an art-specialist. Social-positional regulative comments are directed towards the learner as a person, while art-positional communications address learners as artists: the former are said to be more 'authoritarian' and the latter, more 'respectful'. It is thought that these different types of comments might have had differing effects on communication relations, art-positional comments serving to open communication more than social-positional comments. It was thought that explicit art-related regulative comments played a role in the explication of instructional evaluation criteria.

In all, the advantages of utilising Bernstein's code theory far outweighed any limitations that arose. First, it extended everyday observation in ways discussed above. Second, it enabled a high level of generalisation: almost all aspects of observed pedagogy and curriculum, and all features encountered in teaching-style literature

could be categorised using the concepts of classification and framing. This level of abstraction made comparison across a wide range of differing contexts possible. Third, the concepts of classification and framing were useful for combining different levels of analysis in relation to learners' achievement, namely macro-social power relations and micro-contextual classroom control.

7.5.2. The research and Bernstein's theory of knowledge structure

Bernstein's theory of knowledge structures was useful for explaining some of the differences between science and art. While the strong structure of science as a form of knowledge may have rendered evaluation criteria easily visible, the question as to what constituted explication of criteria in art, a weaker knowledge form, required addressing. Prior investigation into the existence and nature of shared values was required. Further, with art being criterion-based rather than content-based, thought had to be given to what exactly was being selected, sequenced, and paced. In the absence of Bernstein's theory and without the associated external language of description for science, these features may have been missed.

The facts that learners' percentage grades, even when identical, sometimes represented different types of skill, and that evaluators' judgements were broadly rather than exactly concurrent, suggest limits to disciplinary 'closure'. Bernstein's concept of weak knowledge structures with serial languages provided a means to explain this phenomenon.

7.5.3. The research and use of Wright's typology for delineating social class

Wright's (1997) typology was useful for separating different dimensions of social class and investigation of the association of specific aspects of class and learners' achievements. It could be criticised on the basis of its Marxist connotations and emphasis on economic capital, but the theory in distinguishing the dimensions of skill, authority and ownership had more explanatory power than theory in which occupational or lifestyle categories blurred distinctions between these features.

Given that parents' education emerged as the feature most strongly associated with learners' achievement, it could be argued that use of Wright's complex model was superfluous. It should be remembered however, that prior to the analysis the

importance of parent's education for achievement in art in this context was not known. It was possible to superimpose an elaborate description of education types and levels on Wright's model.

7.6. Implications of the research for teacher training, curriculum, and state provision

My research has shown that specific pedagogic features are associated with high levels of achievement in art, and that these features differ to a small but significant degree, for learners in different social positions. With respect to content-based instruction, features associated with high achievement in art for all learners are:

- Clear displays of high-quality fine art in the classroom (Strong classification of discourses)
- Exposing learners to different styles within fine art (Weak classification of different art 'languages')
- Teachers being physically close to learners and continually interacting with them (Weak classification of teacher-learner spaces)
- Teacher-selection of projects and sources of reference (Strong control of macro and some aspects of micro-level selection)
- Learner-selection of aspects within projects such as subject matter, style, and media (Weak micro-level selection of components of projects)
- Teacher-control of the order in which projects are done (Strong macro-level sequencing of projects)
- Teacher-control of the order in which different stages of projects are carried out (Strong micro-level sequencing of components within projects)
- Clear naming and explaining of 'what counts' in a project, of what will be evaluated (Strong framing of evaluation criteria)
- Requiring learners to work with ideas/visual metaphors as well as technical skill (A high level of conceptual demand)

Regarding learners' conduct or what would commonly be referred to as 'discipline', the following are associated with success:

- Relaxed control of entry to and exit from the classroom and learners' social interactions, the more so as learners' social class decreases (Weak control of aspects of regulative discourse)
- Teachers' directing behaviour-related comments towards art behaviours rather than general behaviours (Respectful rather than authoritarian social relations)
- Teachers' seeking deliberately to open up dialogue with individual learners (Open communication relations)
- Teachers' creating a classroom climate where learners can initiate dialogue, especially in classes where the social class of learners is low (Weak control of aspects of regulative discourse)
- Teachers' allowing additional learners to join in individual teacher-learner interactions around individual Art-works, especially when the social class of learners is low (Weak classification of learners)

Pedagogic features linked to success in art contexts are similar to those associated in the literature with achievement in science, key differences being the presence of the following in art classrooms:

- Strong teacher-control of sequencing where teachers specify the order in which processes must be followed in the making of art (whereas in successful science classrooms learners are allowed to alter the sequence of lessons with comments and queries)
- Strong teacher-control of selection where teachers provide or evaluate the sources of references learners use when making art (whereas in successful science classrooms learners are encouraged to select examples)

Some pedagogic features such as the degree to which spaces and materials are shared, and pacing, vary along social class lines, all of these features weakening with decrease in social class. While the effects of sharing space and materials on practical art-making are not evident, the effect of relatively slow pacing is clearly less work. Perhaps if extra time is not available in these situations, heightened teacher-control of selection and sequencing, and increased explication of criteria would ensure that work produced possesses sought-after qualities.

Although specific pedagogic features are associated with high percentage grades in art, the top-achieving class is made up of learners in relatively advantaged social positions, and the change in ranking of schools in the final year of the study reflects that the third-highest achieving class in that year also has privileged learners. Types of skills displayed vary across high achieving school classes, with classes of privileged learners showing a higher degree of interpretation of ideas than classes of less privileged learners. Thus, while specific pedagogy is associated with school classes doing relatively well within their social groups, less privileged classes are never quite on the level of highly privileged ones. This pattern mirrors that in sociological studies of achievement in science (see for example Morais et al 1995).

Pedagogy associated with high percentage grades is not necessarily linked to learners' making artistic judgements aligned with those of their evaluators. Pedagogy linked to high percentage grades for learners with middling to low social class is also linked to higher proportions of learners making aligned judgments. Pedagogy linked to high numbers of upper middle-class learners making aligned judgments is more strongly teacher-controlled than that associated with high grades for these learners. This points a need to tailor pedagogy to desired curriculum outcomes.

A number of ideas arise from these findings. The first relates to variability within individual pedagogic features and variability between different features within a single pedagogy. Teachers can vary the degree of specialisation within individual pedagogic features such as 'consecrated discourse' or 'agents' or 'space', actively intensifying or lowering degrees to which discourse is consecrated, learners are individualised, or space around learners and him/herself freely used. They can assume or relinquish control of instructional and regulative selection, sequencing, pacing and

criteria to differing degrees. Further, surrendering measures of control with respect to some features does not mean abrogation of all control. If teachers can selectively adjust power and control relations to facilitate curricula for socially specific learners, or to realise different types of art curricula, this insight has implications for pre- and in-service teacher training. Teachers need to know which pedagogic features are linked with success in specific contexts.

Second, if shared criteria cannot be assumed and are partially tacit, loose specification of curricular aims and objectives could open the way for multiple interpretations by teachers. This implicit specification could encourage uneven distribution of curricula along social class lines or according to levels of teacher knowledge and experience. If all art learners are to have a high degree of access to consecrated art discourses, curricula need to provide explicit guidelines for teachers. Provision of explicit guidelines need not necessarily mean specification of content in particularistic terms. Art is a discipline in which texts to be evaluated are unique but nevertheless required to share a 'family-type' resemblance with already-known texts. Guidelines could be specified in terms of principles and procedures that narrow possibilities for interpretation with respect to sought-after criteria without being overly restrictive. Given the tacit, visual aspect of art, curriculum formation might be assisted through workshops exposing teachers to a range of examples of successful high-level processes and products. These workshops could involve state and private art institutions as well as teachers and curriculum advisors, and need not limit the range of cultural productions.

A final thought relates to the material resource-based aspects of pedagogy. High proportions of learners making aligned judgments was linked, amongst other features, to the presence of stored visual materials such as books, journals, videos, and posters, and visits to consecrated galleries – these materials and gallery visits being more scarce in low than high social class contexts. One way of addressing this inequality would involve provision of these resources by the state, in inverse relation to privilege.

The research has also shown something of the intricacies involved in the judgement of texts in which metaphorical links have been made and which carry complex meaning,

the texts in this case being works of art and art exhibitions. There is a limit to closure in that individual judgements vary, but variation has been shown to occur along a finite number of axes within a tradition of shared values. This finding may have relevance for other fields of knowledge with weak grammars such as history, anthropology, sociology, cultural studies, political science, and others.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE ADMINISTERED TO LEARNERS

QUESTIONNAIRE FOR LEARNERS

1. Number:

2. Gender (male/female):

3. What is your age?

4. Please circle the answer that applies: do you live with
   ONE PARENT?
   TWO PARENTS?
   Other family member(s) as primary guardian(s) ?
   Other person(s) as primary guardian(s)?

5. If your parents are divorced, who do you spend most time with? How often do you see the other parent?

6. Please describe your father's work as fully as possible, even if he is unemployed at present:

7. Please describe your mother's work as fully as possible, even if she is unemployed at present:

8. If you answered 'other family member(s)' or 'other person(s)' in Q.4, what work does this person/people do?

9. Who is the main breadwinner in your family?

10. What are your father's educational qualifications? Please circle the relevant:
   -no formal education
   -some of primary school
   -all of primary school
   -some of high school
   -all of high school
   -part of a degree

-one or more degrees
-post-school diploma/certificate
-ABET level 1/2/3/4/5/6
-Other training certificates (please specify)

11. What are your mother's educational qualifications? Please circle the relevant:

-no formal education
-some of primary school
-all of primary school
-some of high school
-all of high school
-part of a degree
-one or more degrees
-post-school diploma/ certificate
-ABET level 1/2/3/4/5/6
-Other training certificates (please specify)

12. If you answered 'other family member(s) or 'other person(s)' in Q.4, what are the educational qualifications of this person/these people? Please circle the relevant:

-no formal education
-some of primary school
-all of primary school
-some of high school
-all of high school
-part of a degree
-one or more degrees
-post-school diploma/certificate
-ABET level 1/2/3/4/5/6
-Other training certificates (please specify)

13. Which art subject are you registered for? (art higher grade/painting standard grade/ etc):

14. Please describe the qualities you think a work of art (made in matric) should have in order to get high marks:

15. Do you intend having an art - related career after school?

Please circle the relevant: yes no

16. If you answered 'yes' to Q.15, please say what you hope to do?

17. Is there anyone in your life who has influenced your understanding of art or approach to art? (please specify) ...

Thank you very much for your time!

QUESTIONNAIRE 2002

1. Number:

2. Gender (male/female):

3. Age:

4. Please circle the answer that applies: do you live with

TWO PARENTS?
ONE PARENT (please specify)
ONE PARENT plus ONE OR MORE OTHER ADULTS (please specify)
OTHER FAMILY MEMBER(S) as primary guardian(s) (please specify)
OTHER PERSON(S) as primary guardian(s) (please specify)

5. If your parents are divorced,
a) who do you spend most time with?
b) how often do you see the other parent?
c) how long has this been the case? (please indicate number of months/years)

6. Please describe your father's work as fully as possible, even if he is unemployed at present (please specify his job title as well as what he actually does if you can)

7. Please describe your mother's work as fully as possible, even if she is unemployed at present (please specify her job title as well as what she actually does if you can)

8. If you answered 'other family member(s)' or 'other person(s)' in Q.4, please describe this person/s's work even if s/he is unemployed at present (please specify their job title as well as what they actually do if you can)

9. Who is the main breadwinner in your family?

(continued on p.2)

10. What are your father's educational qualifications? Please circle the relevant:

-no formal education
-some of primary school
-all of primary school
-some of high school
-all of high school
-part of a degree
-one or more degrees
-post-school diploma/certificate
-ABET level 1/2/3/4/5/6
-Other training certificates (please specify)

11. What are your mother's educational qualifications? Please circle the relevant:

-no formal education
-some of primary school
-all of primary school
-some of high school
-all of high school
-part of a degree
-one or more degrees
-post-school diploma/ certificate
-ABET level 1/2/3/4/5/6
-Other training certificates (please specify)

12. If you answered 'other family member(s) or 'other person(s)' in Q.4, what are the educational qualifications of this person/these people? Please circle the relevant:

-no formal education
-some of primary school
-all of primary school
-some of high school
-all of high school
-part of a degree
-one or more degrees
-post-school diploma/certificate
-ABET level 1/2/3/4/5/6
-Other training certificates (please specify)

13. Please describe qualities you think a work of art (made in matric) should have in order to get high marks:

(continued on p.3)

14. Do you intend having an art - related career after school?
Please circle the relevant: yes no

15. If you answered 'yes' to Q.15, please say what you hope to do?

16. In the past TWO years,
a) How many times have you visited art galleries with your school? (please specify galleries)

b) How many times have you visited art galleries on your own/with family/with friends? (please specify galleries)

17. Do you have any art in your home? (If yes, please specify in detail)

18. Roughly, how many books do you have in your home?

19. Roughly, how many of these are art books? (please indicate the kind of art books)

(continued on p.4)

20. Which of the opinions below is closest to your own view? (please circle just one of the following):

a) galleries aren't my strong point, I can't appreciate them
b) paintings/drawing are nice but difficult, I don't know enough to talk about them
c) I love the Impressionists
d) abstract painting/drawing and twentieth-century art movements interest me as much as the classical styles

21. Which of the styles/concepts/movements/schools listed below are you familiar with? In each case, name some associated artists if you can

	Familiar with? (add yes/no)	Artists? (please list)
Italian Renaissance painting		
expressionism		
Cubism		
Surrealism		
conceptual art		
'resistance' art		
abstraction		
realism		
Community Arts Project (CAP)		
South African artists		

Thank you very much for your time!

APPENDIX 2: DESCRIPTIVE STATISTICS COMPARING THE MEAN PERCENTAGE GRADES OF DIFFERENT SCHOOL CLASS, SOCIAL CLASS, RACE AND GENDER GROUPS

2.1. Descriptive statistics comparing the mean percentage grades of different school classes

Percentage grades 1999: means and standard deviations

School	N	Mean	Std. Dev.
A	20	73.65	9.29
B	14	52.86	16.40
2B	25	50.36	22.57
3B	26	71.42	11.48
1A	18	78.56	7.55
F	9	57.89	11.16
2A	18	67.22	13.83
H	28	79.46	11.70
1B	15	65.33	12.37
K	25	53.12	14.82
L	23	66.35	14.49
M	12	73.42	11.53

Percentage grades 2000: means and standard deviations

School	N	Mean	Std. Dev.
2B	25	54.08	16.97
3B	26	68.46	11.62
1A	21	79.05	7.24
2A	14	68.36	10.27
H	27	77.67	8.34
1B	22	63.46	10.20
K	25	63.68	14.42
L	14	62.36	12.83
M	11	76.82	8.4
3A	13	83.00	9.87

Percentage grades 2001: means and standard deviations

School	N	Mean	Std. Dev.
3	21	58.62	14.38
4	26	71.92	10.03
5	15	84.40	5.99
7	16	69.56	12.30
8	30	77.20	9.21
9	11	67.00	8.97
12	22	62.59	10.98
13	12	70.50	14.84
14	14	87.93	5.61

Percentage grades 2002: means and standard deviations

School	N	Mean	Std. Dev.
3	25	56.36	14.73
4	21	79.91	10.08
5	25	75.84	7.98
7	26	59.08	8.15
8	26	80.35	8.94
9	26	57.85	13.78
14	16	87.50	7.26

2.2. Practically significant differences (d) between the mean grades of socially similar schools

Legend: d = 0.2 = small effect
d = 0.5 = medium effect
d = 0.8 = large and only then practically significantly different

3A=school class high in social class; high-achieving
2A=school class medium in social class; high-achieving
1A=school class low in social class; high-achieving
3B=school class high in social class; lower-achieving
2B=school class medium in social class; lower-achieving
1A=school class low in social class; lower-achieving

Year 1999	d
Schools 1A and 1B	d=1.069
Schools 2A and 2B	d=0.75
(3A not yet in study)	
Year 2000	d
Schools 1A and 1B	d=1.53
Schools 2A and 2B	d=0.84
Schools 3A and 3B	d=1.25
Year 2001	d
Schools 1A and 1B	d=1.941
Schools 2A and 2B	d=0.76
Schools 3A and 3B	d=1.596
Year 2002	d
Schools 1A and 1B	d=1.3
Schools 2A and 2B	d=0.18
Schools 3A and 3B	d=0.75

2.3. Descriptive statistics comparing the mean percentage grades of different race groups

Percentage grades 1999-2002: means and standard deviations

Legend:
A = Asian
B = Black
C = Coloured
I = Indian
W= White

Race	N	Mean	Std. Dev.
A	2	69.00	12.73
B	66	68.67	13.60
C	307	64.48	16.08
I	14	66.50	15.61
W	340	73.34	13.88

2.4. Descriptive statistics comparing the mean percentage grades of the gender groups

Percentage grades 1999-2002: means and standard deviations

Gender	N	Mean	Std. Dev.
Female	420	71.16	14.63
Male	309	66.16	15.96

2.5. Descriptive statistics comparing the mean percentage grades associated with the twelve locations (positions) in Wright's (1997) typology

Percentage grades 1999-2002: means and standard deviations

Legend:
1 = semi-skilled workers
2 = semi-skilled supervisors
3 = semi-skilled managers
4 = skilled workers
5 = skilled supervisors
6 = skilled managers
7 = expert workers
8 = expert supervisors
9 = expert managers
10= petty bourgeois (self-employed with up to two employees)
11= small employers (self-employed with three to 20 employees)
12= capitalists (self-employed with over 20 employees)

Class location	N	Mean	Std. Dev.
1	108	65.68	15.24
2	38	62.16	18.66
3	24	62.21	15.74
4	121	66.01	16.84
5	96	67.82	13.49
6	36	72.11	11.47
7	50	78.72	12.95
8	51	76.73	14.04
9	33	73.82	11.20
10	116	69.90	14.09
11	70	68.46	16.52
12	20	65.85	14.84

2.6. Descriptive statistics comparing the mean percentage grades associated with all employers and all employees in Wright's (1997) typology, as two groups

Percentage grades 1999-2002: means and standard deviations

Legend:
1 = employee breadwinners (locations 1-9 in Wright's typology)
2 = employer breadwinners (locations 10-12 in Wright's typology)

Group	N	Mean	Std. Dev.
1	557	68.81	15.62
2	206	69.02	15.00

2.7. Descriptive statistics comparing the mean percentage grades associated with all employees at each of three authority levels in Wright's (1997) typology, as three groups

Percentage grades 1999-2002: means and standard deviations

Legend:
1 = all worker-employees (locations 1, 4, 7 in Wright's typology)
2 = all supervisor-employees (locations 2, 5, 8 in Wright's typology)
3 = all manager-employees (locations 3, 6, 9 in Wright's typology)

Group	N	Mean	Std. Dev.
1	279	68.16	16.30
2	185	69.11	15.64
3	93	70.16	13.36

2.8. Descriptive statistics comparing the mean percentage grades associated with all employees at each of three skill levels in Wright's (1997) typology, as three groups

Percentage grades 1999-2002: means and standard deviations

Legend:
1 = all semi-skilled employees (locations 1, 2, 3 in Wright's typology)
2 = all skilled employees (locations 4, 5, 6 in Wright's typology)
3 = all expert employees (locations 7, 8, 9 in Wright's typology)

Group	N	Mean	Std. Dev.
1	170	64.40	16.12
2	253	67.57	15.04
3	134	76.75	13.03

2.9. Descriptive statistics comparing the mean percentage grades associated with all breadwinners with specific education levels

Percentage grades 1999-2002: means and standard deviations

Legend:
A/B= breadwinners with some or all of primary school
C = breadwinners with some of secondary school
D = breadwinners with some of secondary school plus vocational training
E = breadwinners with all of secondary school
F = breadwinners with all of secondary school plus tertiary education other than university degrees or tertiary-level art diplomas
G/H= breadwinners with all of secondary school plus tertiary-level fine art degrees or diplomas

Group	N	Mean	Std. Dev.
A/B	27	70.59	15.79
C	120	62.98	16.99
D	63	67.21	16.54
E	123	66.76	14.31
F	242	68.34	14.84
G/H	188	74.99	13.45

APPENDIX 3: SOUGHT-AFTER CRITERIA FOR PRACTICAL ART-MAKING

I posit that in the literature on assessment in art, described sought-after criteria can be grouped into four broad categories namely, 'demonstration of creativity, originality, or use of the imagination', 'technical competence', 'conceptual content, ideas, feeling, expressivity', and 'ability to criticise art/make visual analyses', with aesthetic sensibility potentially pervading all of these areas. Different phrasings of these qualities are shown in Table 34 below. Phrasings of sought-after qualities are difficult to categorise in that they are frequently described in inter-connected ways, and separation of comments in the table is thus analytical rather than intended by the writers concerned.

Table 34: Sought-after criteria for practical art-making

Sought-after qualities	Different phrasings of sought-after qualities in literature on assessment
Technical competence	"establish satisfactory relationships within organisational aspects of the work"; "a degree of acquired skill and technical competence"; "evidence of an ability to research and select information" (MacGregor,1990, p.324, referring to the Scottish national secondary school curriculum); "independence in selecting techniques, materials, subjects, style, and approaches, and a striving towards a maximum development of intellectual qualities ... manifest in the process of sketching, designing, ... and ... producing mature works of art" (Schonau, 1991, p. 82, referring to Dutch schools' national assessment) "forming and composing from observation ... fantasy ... experience ... use of media, materials, and processes" (Hermans, 1991, p.78, referring to Dutch schools' national assessment) "investigating visually and recording; using media; using visual elements" (MacDonald, 1993, p.35, referring to Scottish *National Guidelines Expressive Arts 5-14*) "Recording what has been seen, imagined, or remembered; gathering and using resource materials; using different materials and techniques in practical work; reviewing and modifying work" (MacDonald, 1993, p.34, referring to national curriculum strands in England) "Producing art ... with a particular composition, subject matter, expressive character, or expressive content" (Blaikie, 1994, p.300, referring to "National Assessment of Educational Progress" (NEAP) in North America) "emphasis on solving formal and media exploration problems" (Blaikie, 1994, p.303, referring to the "Advanced Placement" programme in North America) "assessors look at both form and content in assessing quality" (Blaikie, 1994, p.303, referring to the "Advanced Placement" programme in North America) "varied exploration with regard to media, technique, style, and subject matter" (Blaikie, 1994, p.304, referring to "Project Zero Arts PROPEL" in North America) "students are required to explore formal concepts visually, and to reflect upon them verbally ... then assessed along a variety of qualitative dimensions such as engagement, technical skills, imaginativeness, and critical evaluative skills ... Criteria for assessment of ... portfolios include completeness and regularity of journal entries; quality of art products on "technical and imaginative" grounds ... and the students' own ability to be self-critical" (Blaikie, 1994, p.305, referring to "Project Zero Arts PROPEL" in North America) "Persistence in research; technical skill; understanding the functions and characteristics of media; understanding the fundamentals of design" (Blaikie, 1994, p.307, referring to "International Baccalaureate" assessment)

	The curriculum includes a "productive domain" that 'is concerned with the abilities to select, control and use the formal and technical aspects of art and design in the realisation of ideas, feelings and intentions" (Steers, 1994, p.292-3, referring to the national schools curriculum in England and Wales) "the technical quality of the work produced ... the extent to which the material with which the students work has been handled with control and understanding ... also ... the extent to which the forms that are used display an intelligent use of technique. Put another way, do the techniques employed support what the work is intended to express; is there a consonance between the two?" (Eisner, 2002, p.183, referring to what to look for in student work in general)
Demonstration of creativity, originality, or use of the imagination	"make ... response [to projects] in a sensitive, imaginative manner" (MacGregor, 1990, p.324, referring to the Scottish national secondary school curriculum); "forming and composing from observation ... fantasy ... experience ... use of media, materials, and processes' and 'encouraging experimentation and innovation through the inventive use of ,materials and techniques" (Hermans, 1991, p.78, referring to Dutch schools' national assessment) "Creating and designing; communicating" (Macdonald, 1993, p.35, referring to Scottish national guidelines) "Producing art ... with a particular composition, subject matter, expressive character, or expressive content" (Blaikie, 1994, p.300, referring to "National Assessment of Educational Progress" (NEAP) in North America) "evidence of great individuality of interpretation of basically formalist problems" (Blaikie, 1994, p.303, referring to the "Advanced Placement" programme in North America) "the critical factor is the way in which source material is used. When it is used in a hackneyed, derivative, and unimaginative way, freshness of conception and interpretation are impeded" (Blaikie, 1994, p.303, referring to the "Advanced Placement" programme in North America) "evidence of an intensive exploration of a personal, central interest ... [evidence] that the student has worked independently on an in-depth project – the kind of work an artist working in a studio might undertake. For example, students may take colour, a visual symbol, a material or process, or a subject theme, and investigate it by experimenting in various ways. Using a central visual idea, students are required to reveal its evolution" (Blaikie, 1994, p303, referring to the "Advanced Placement" programme in North America) "varied exploration with regard to media, technique, style, and subject matter" (Blaikie, 1994, p.304, referring to "Project Zero Arts PROPEL" in North America) "students are required to explore formal concepts visually, and to reflect upon them verbally ... then assessed along a variety of qualitative dimensions such as engagement, technical skills, imaginativeness, and critical evaluative skills ... Criteria for assessment of ... portfolios include completeness and regularity of journal entries; quality of art products on "technical and imaginative" grounds ... and the students' own ability to be self-critical" (Blaikie, 1994, p.305, referring to "Project Zero Arts PROPEL" in North America)) "Imaginative and creative thinking and expression" (Blaikie, 1994, p.307, referring to assessment for the "International Baccalaureate") "inventive use of an idea or process. By inventiveness I refer to the productive novelty the work displays: does the work say something new or say something quite familiar in quite a new way? Put another way, does the work reflect a creative use of idea or process that relates constructively to its expressive intent? Is the work imaginative?" (Eisner,2002, p.183, referring to what to look for in learners' work in general)

Conceptual content, ideas, feeling, expressivity	"independence in selecting techniques, materials, subjects, style, and approaches, and a striving towards a maximum development of intellectual qualities ... manifest in the process of sketching, designing, ... and ... producing mature works of art" (Schonau, 1991, p.82, referring to Dutch schools' national assessment) "Creating and designing; communicating" (Macdonald, 1993, p.35, referring to Scottish *National Guidelines Expressive Arts 5-14)* "assessors look at both form and content in assessing quality" (Blaikie, 1994, p.303, referring to the "Advanced Placement" programme in North America) "varied exploration with regard to media, technique, style, and subject matter" (Blaikie, 1994, p.304, referring to "Project Zero Arts PROPEL" in North America) "Imaginative and creative thinking and expression" (Blaikie, 1994, p.307, referring to assessment for the "International Baccalaureate") The curriculum includes a "conceptual domain" that "is concerned with the formation and development of ideas and concepts" (Steers, 1994, p.292, referring to national school curricula in England and Wales) "the expressive power or aesthetic quality it displays" (Eisner, 2002, p.184, referring to what to look for in learners' work in general)
Ability to criticise art/make visual analyses	"Observing, reflecting, describing, responding" (Macdonald, 1993, p.35, referring to Scottish *National Guidelines Expressive Arts 5-14*) "Knowledge of different kinds of art ... different periods, cultures and traditions ... Applying knowledge of the work of other artists to their own work" (MacDonald, 1993, p.34, referring to national curriculum strands in England) "perceiving and responding to art; valuing art; knowing about art; making and justifying judgements about aesthetic merit" (Blaikie, 1994, p.300, referring to "National Assessment of Educational Progress" (NEAP) in North America) "students are required to explore formal concepts visually, and to reflect upon them verbally ... then assessed along a variety of qualitative dimensions such as engagement, technical skills, imaginativeness, and critical evaluative skills ... Criteria for assessment of ... portfolios include completeness and regularity of journal entries; quality of art products on 'technical and imaginative' grounds ... and the students' own ability to be self-critical" (Blaikie, 1994, p.305, referring to "Project Zero Arts PROPEL" in North America) "Ability to evaluate one's own growth and development" (Blaikie, 1994, p.307, referring to "International Baccalaureate" assessment) The curriculum includes a "critical and contextual domain" that "is concerned with those aspects of art and design which enable candidates to express ideas and insights which reflect a developing awareness of their own work and that of others" (Steers, 1994, p.293, referring to the national school curriculum for England and Wales)

APPENDIX 4: SCHEDULES FOR SEMI-STRUCTURED TEACHER INTERVIEWS

TEACHER INTERVIEW #1; 1999/ 2000

Q1. What equipment/materials does the school provide, and what do learners bring themselves?

Q2. About projects – do you link practical projects to anything like history of art or advertising? [Probe responses for frequency and type of link]

Q3. If we said that projects could range from simple to quite complex, with the simplest being technical exercises involving elements of art like tone/texture/ colour, and the next hardest, exercises involving principles like perspective and composition; and the most complex involving depiction of ideas or feeling – what level do you expect grade 12's to work at? [Probe answers for reasons for expectations]

Q4. Now, a big question, but let's maybe take it slowly, step by step. I need to get a full idea of projects the present grade 12's did, over the last three years. Can you go over all the projects you did with them, just briefly, just to give me an idea of what they were about? [Once the teacher has done this, revisit each project systematically with the following questions:]
(a) What were all the things that learners had to do?
(b) What did you say or show or do when you introduced the project?
(c) What could learners select?
(d) How did you evaluate the project; what were your evaluation criteria?
(e) Do you have any handouts or written information about the project that I could have?

Q5. Where do your ideas for projects come from?

Q6. Do you ever work with other teachers to devise projects?

Q7. Can you tell me what criteria you use to decide if learners' work is worth an 'A', 'B','C','D','E', or 'F' – can we go through each symbol separately? What does a work have to have, to get an 'A'? And a 'B'? [etc]

Q8. How, and when, do you comment on learners' work?

Q9. How do you decide how many projects to give a class?

Q10. Which would you say influenced you most – requirements for matric, or learners' needs?

Q11. Can you describe your weakest learners and your strongest, in any way you like?

Q12. Do you refer to the art syllabus?

Q13. What sort of art background and training did you have?

TEACHER INTERVIEW #2; 2001/2002

Q1. [Asked once teachers had completed the 'judgement task' in which they were required to rank sets of drawings 'A' of apples and 'B' of pineapples, in order of excellence, and describe the strengths of drawings in 'set C'] What made you put drawing [first choice] first? In what way is [second choice] weaker than [first choice]? In what way is [second choice] stronger than [third choice]? In what way is [third choice] weaker than [second choice]? In what way is [third choice] stronger than [fourth choice]? [etc, with all five drawings]

Q2. Can you think of any other way to order these drawings, do you think they could be ranked according to anything else?

Q3. How would you rank these drawings in terms of the one you liked most to the one you liked least, purely subjectively?

Q4. What do you expect learners to 'have' as a result of doing at with you for two or three years – what do you expect learners to 'take away with them?'

Q5. Now, the big question about the projects again. I need to know about the projects the present grade 12's did, over the last three years. Can you go over all the projects you did with them, just briefly, to give me the idea of what they were about? [Once the teacher has done this, revisit each project systematically with the following questions:]
(a) What did learners have to do?
(b) What did you say or show or do when you introduced the project?
(c) What could learners select?
(d) How did you evaluate the project; what were your evaluation criteria?
(e) Do you have any handouts or written information about the project that I could have?

Q6. Do you have a copy of the matric exam paper for these [the current] grade 12's, that I can take away with me?

Q7. Can you please describe each learner briefly, in any way you like? We should maybe work through a class list

Q8. Can you tell me about any exhibitions or galleries you visited with these [the current] grade 12's?

APPENDIX 5: LIFE DRAWING EXERCISES CARRIED OUT BY SCHOOL CLASSES NOT OTHERWISE IN THE STUDY, FOR USE IN THE RECOGNITION INSTRUMENT

PRACTICAL PROJECT 'Apple'

Make an accurate observation drawing of a red apple. Look at tone changes, patterns, and other details on the surface of the apple. Put down subtle tone changes – try to create an illusion of depth. Be aware of the marks you are making with the pencil. Draw just the apple on an A3 sheet of paper, with no shadows or background details at all. The body of the apple should be 10cm high (excluding the stalk).

Scale: A3
Medium: pencil
Surface: cartridge paper
Style: naturalistic

PRACTICAL PROJECT 'Pineapple'

Make an accurate observation drawing of a whole pineapple. Look carefully at tone changes and other details on the surface of the pineapple. Pay attention to how you use line and tone in your drawing. Try to create an illusion of depth. Draw just the pineapple on an A3 sheet of white cartridge paper – with no shadows or background details at all. The pineapple should be about 30cm high from the tip of its leaves to its base.

Scale: A3
Medium: pencil
Surface: cartridge paper
Style: naturalistic

APPENDIX 6: THE RECOGNITION INSTRUMENT

PLEASE SEE ATTACHED PHOTOGRAPHS

THE APPLE AND PINEAPPLE DRAWINGS WERE MADE FOR A LIFE DRAWING (OBSERVATION DRAWING) EXERCISE, BY GRADE 10 and 11 LEARNERS

A. Using sheet A
Please arrange the letters/numbers of the five photographs of apple drawings in the blocks below, from the drawing showing the highest level of technical competence, to that showing the lowest level of technical competence:

most technical competence >>>>>>>>>least technical competence

B. Using sheet B
Please arrange the letters/numbers of the five photographs of pineapple drawings in the blocks below, from the drawing showing the highest level of technical competence, to that showing the lowest level of technical competence:

most technical competence >>>>>>>>>least technical competence

A1

A2

A3

A4

A5

B1

B2

B3

B4

B5

APPENDIX 7: EXAMPLES OF REASONS GIVEN FOR THE RANKING OF DRAWINGS

Reasons given by three respondents (the moderator moderating most exhibitions in the study, and the two teachers whose classes achieved the highest mean grades over the four consecutive years of the study) for their ranking of drawings, stated and hand-noted in interviews, are given below. Probed responses are indicated in italics. The interview opened with the question "Can you tell me why you think this [selected drawing] is the strongest drawing?", and continued with questions as to the relative strengths and weaknesses of the remaining drawings.

Reasons given by the moderator evaluating most exhibitions in the study

[Ranking of drawings: A3 A5 A4 A1 A2]

A3 strongest
It's handling of line, sensitivity in use of line – *[probe 'sensitivity'] – it's not harsh, there's variation.* Tone – line also deals with tone, it merges with tonal values. Understanding of shape, between a sense of solidity and appleness. [There's] a sense of foreground-background handling of tonal values, use of space. See the lights have a plastic, tactile feel if you compare it to the others. It's the only drawing where they're using the elements of art to create a three-dimensional shape on a flat surface. Skilled use of materials, media. There are technical problems – [around] the base, the shading could have been more worked in to reflect the roundness more. A5 is better in terms of gradating one dimension into another – it's technically superior, but I don't like the technical handling of the rubber – it's drawn with a rubber, it looks less fresh. A3 [has a] lovely indication of the stalk. The pressure on the pencil has been very well handled.

A5 weaker than A3
I've told you already [I don't like the technical handling of the rubber – it's drawn with a rubber, it looks less fresh]. Also the line in the middle, you can see where they worked (shows line where one set of shading meets another). The stalk is clumsily handled – *[probe 'clumsily handled'] – it doesn't look like a stalk, it's too solid and dark.* I don't get the sense of plunging into the fruit, it's flatter. On the other hand, it could be a different kind of apple. It may have had less surface patterning. A5 is problematic (shows core area) – technically A3 is superior, it plunges in (shows core area).

A5 stronger than A4
Better understanding of shape [in A5]. In A4 the strange information is distracting – it's nicely drawn – *[probe 'nicely drawn'] – nice tonal values, nice round shape, it complements the shape of the apple but it's confusing. The way the form is isolated from the ground is delicately handled* – but it's not reading as an apple. I don't like the dark outline, it flattens the shape, it competes with the middle (shows outline and dark lines in middle area of drawing), [they're] trying to get roundness. [There's] less sense of roundness.

A4 stronger than A1
A1 has a nice sense of shape but the tones are distracting because they're added on – it's not clear what they represent, they're not an integral part of the shape. The artist is more decorative/design oriented, but the pencil is very delicately done – *[probe 'delicately done'] – maybe it's careless technique, smudging. The stalk is nicely handled. Maybe the learner works slowly and if she or he'd had more time they'd have integrated the tonal values more effectively.* Despite the oddity (shows curved shape in A4), there's better integration of tonal values, it looks more resolved/ finished, there's a sense of changing surfaces. *[probe 'better integration'] – in A1 the darks, greys, whites, are clearly demarcated, the shapes don't suit an apple. In A4 the darks, greys, and whites intermingle. [probe 'looks more resolved'] – The same thing. [probe 'changing surfaces'] – You can see that 'goes in', that 'goes out' (shows darker, then lighter areas on A4), you can feel the curve on the bottom, it's under control. A1 is more confused around shape.*

A1 stronger than A2
A2 as you can see, is not visually aware. They struggle to put into visual form, what they're seeing. It's like a patchwork quilt. Very flat. There's an awareness of line and tone (shows shading in middle of drawing), but they're unable to shift from two to three dimensions. Not unattractive, but technically weak. The pencil is handled delicately but he or she hasn't understood how to make shadows and highlights reflect roundness. In A1 [there's] an understanding of shape and form, an attempt to render three dimensions.

A2 weakest
[As I've said] [A2 as you can see, is not visually aware. They struggle to put into visual form, what they're seeing. It's like a patchwork quilt. Very flat. There's an awareness of line and tone (shows inner shading), but they're unable to shift from two to three dimensions. Not unattractive, but technically weak. The pencil is handled delicately but he or she hasn't understood how to make shadows and highlights reflect roundness.]

Reasons given by teacher 3A

[Ranking of drawings: A3 A5 A4 A1 A2]

A3 strongest
Strong sense of form. Tonal variation. Originality – the markings on the surface.

A5 weaker than A3
A5 is more controlled, it's a more realistic representation. A3 gives a feeling of something, it's more personal.

A5 stronger than A4
A4 is very stylized, the markings are like a tomato – they're not carefully observed. There's a confusion of form (shows leaf-like shape). A4 is more flat. A5 captured the shininess of the surface, the light and shade [have been] captured (shows highlighted areas).

A4 stronger than A1
A1 has patches (shows zig-zag shape). A4 has a more atmospheric feel (makes ball shape with hand) – *[probe 'atmospheric feel'] – I don't know how to explain it. Light and dark. A4 is asymmetrical, A1 is very symmetrical. A1 is flat, it has an outline, the shading works as an outline.* I like the shaded, rubbed areas (shows dark areas in A4).

A1 stronger than A2
A1 has more form.

A2 weakest
A2 has no understanding of shading or form – [these are] just markings on a surface, it's very flat (shows shading in A2). [But] interesting use of the pencil in a decorative way.

Reasons given by teacher 1A

[Ranking of drawings: A5 A3 A4 A1 A2]

A5 the strongest
Interesting removing and building up, taking away and adding marks – the form starts to happen. There's contrast of value. It has shape.

A3 weaker than A5
It's more decorative. They've emphasized parts instead of the whole – they've gone into texture and mark-making in isolation – the marks don't work across the form it's trying to create. The values, the shape, the experimental shading are okay – it depends on the brief, I can't look in isolation, if it was decorative A5 would do more poorly.

A3 stronger than A4
(Because of) its decorative mark-making. It reads as an apple more than A4, A4 looks like a tomato. A3 is more consistent in terms of representing a form. A4 is not clear in terms of representing a form, what comes out, what goes back. A4 is ambiguous in terms of form advancing and receding, what is form and what is void.

A4 stronger than A1
I think there's quite a big difference. A1 is quite decorative. There's very little looking in terms of representation of an apple – it's stereotyped. A4's strengths: the pencil's been used, the lines have been rubbed to create form, form's structured with sharp lines. The darks and lights emphasise form. A1's stereotyped into being a symbol. There's very little looking, the person's drawing what they *perceive* an apple to be like. I don't know if it's a red or a yellow apple, I can't see what type of apple it is.

A1 stronger than A2
It depends on the brief. It's more like an apple.

A2 weakest
It's haptic. Is it weaker? It is satisfying. It is decorative. The person tried to represent an apple from the inside and is dedicated to creating something, but there's very little

outward looking – the person can't draw an apple. They looked at it and made marks but the marks don't relate to the object. There is commitment to drawing an apple, it meant a lot to the person. It could get a strong or a weak mark [grade], depending on what the teacher set – *[probe 'what the teacher would have set for this to be a strong drawing] – for example, if the teacher said 'experience an apple, look at an apple, smell an apple, hug an apple. Then draw it'*. Life drawing is not observation drawing, it's not just academic drawing.

APPENDIX 8: MODERATORS' DESCRIPTIONS LEARNERS' FINAL EXHIBITIONS

8.1. Moderators' descriptions of "common denominators" and A-rated qualities in learners' exhibitions

HB: What were the common denominators at [3A]?
M3: The drawing was visually rich, one can see layers. It's about the process involved, about the kinds of stimulus he [the teacher] gives. One can see the stimulus that comes from his side, one can see his input. It's different from other schools, there's higher stimulation.
HB: What did you give 'A's' for, at [3A]?
M3: Technical skill; a big body of work; the way they [learners] interpret the projects, it's very difficult to surprise [the viewer]. I get a sense that if you stand in front of the work, it's very satisfying in many ways

HB: And the common denominators at [3B]?
M2: At [3B], a lot of the painting was naïve – romantic, illusional, sentimental interpretation of life ... [You] even [see it] in the presentation, for example a pupil exhibited with pot-plants and glitter on the floor, and velvet around [objects]. But it comes from the home, so you can't penalise them. I still look for formal elements and technique, subject matter takes second place ... Some teachers change the way they see, they make them see other things in life. So they rise above just their own world.
HB: And the 'A' at [3B]?
M2: Technical ability and bulk of work... [not] content. I still have to reward the child not pushed far enough, that's not the child's fault, the child achieved the maximum in the circumstances.

HB: What were the common denominators at [2A]?
M3: At [2A] the work was technically maybe weaker? But the images were more interesting, the images were very interesting. It wasn't the usual portrait and still-life. They were all multiple images, juxtapositions of spatial things, things in a space. Although they were all the same size, size was a common denominator.
HB: What did you give the 'A' for, here?
M3: At [2A] the 'A's' were less for technical skill, more where one gets a sense of layering, where there's visual layering.

HB: Could you describe what you think the common denominators at [2B] are?
M2: Technically they're not so competent: those who were, probably arrived there on their own, by experimentation on their own. They're technically weak. Content-wise they're more mature than [3B] – they're more thinking learners, they think about what's happening around them....[2B's] content is...[high] because of hardship [these kids have known hardship]. They're very diverse, owing to their different backgrounds. The painting's interesting, but it's the product of lazy learners. They're not pushed far enough ...

HB: What did you give the 'A' for, at [2B]?
M2: At [2B] the 'A' was for exploration of content, technical ability, the bulk of work

HB: What were the common denominators at [1A]?
M3: At 1A, the common denominator is the medium, the beautiful quality in the prints. You have to consider technique, because it's printmaking. I looked for fine nuances in the work, choice of imagery, juxtaposition of images

HB: What did you give the 'A' for at [1A]?
M3: At [1A], I gave the 'A' for choice of subject matter – not a high level of interpretation, but compositionally, the perspective of the images. The strange copying of the images made for interesting composition where the principles of design started to operate – for example, rhythm, contrast. And very fine technical skill, very good skills.

HB: And common denominators at [1B]?
M3: The way the work is presented, in the working space. There's not a strong presence, it's technically weaker than the others [other schools].

HB: And the 'A's'?
M3: The 'A's' are difficult, because I'm not sure if the pupils were challenged. There was enjoyment in painting, a sense of mark-making and completeness, not just slapping (the paint onto paper). A sense that they wanted to complete (the image). The 'A's' had more work and portfolios. Technically, the 'A' was not an 'A'. I gave the one a 'B' because the painting technique was nice: if all his work had been like that, he would have done very well.

8.2. Moderators' descriptions of strengths and weaknesses in the exhibitions of the highest and lowest achieving learners at each school in the sample selected for detailed study

Descriptions of strengths and weaknesses in learners' exhibitions were noted by hand in interviews with the moderators. Moderators were asked "Which skills or strong qualities did you award this grade for?", and, once this question had been fully answered, "What prevented you from giving this exhibition a higher grade, what are the weaknesses in this exhibition?" Initial responses to the questions are presented in bold lettering below. Responses were probed with questions such as "What do you mean by ...?" or "Can you say a bit more about why you said ..." Probed-for responses are presented in normal type below. The abbreviation 'sh' indicates 'showing' or 'pointing' to areas on art-works. Descriptions of strengths and weaknesses in the exhibitions with the highest grades in each school class in the sample are provided below.

Strengths and weaknesses in the exhibition of the top-achieving learner experiencing pedagogy 3A (the exhibition was awarded 98%)

Strengths

- **Very personal style**
- **High level of skill with all media, pencil, mixed media, etc.**
- **Maturity of subject-matter** – she's taken the obvious theme and approached it in a mature, intelligent way – she isolates parts of the subject, brings out parts, basically selection of content.
- **Strong overall impression**

Weaknesses

- **Individual pieces are not complete, there're technical problems, technical facility/compositional problems** – some areas are mechanically filled-in. In that one (sh image with bird of prey), the background is alien to the foreground.

Strengths and weaknesses in the exhibition of the top-achieving learner experiencing pedagogy 3B (the exhibition was awarded 100%)

Strengths

- **Consistency throughout, in style**
- **Structure: very strong structure or composition**
- **Control of medium, the media are *extremely* well handled, she's completely at home with the medium**
- **Concept-wise, there's thought behind the pictures: they could have been kitsch, but they're not, like these** (sh exam works) **there's thought behind them** – the way things have been put together, unusual elements put together, she doesn't just copy
- **One can't expect more at matric level**

Strengths and weaknesses in the exhibition of the top-achieving learner experiencing pedagogy 2A (the exhibition was awarded 80%)

Strengths

- **Large body of work**
- **Reasonable technical ability** – the line and tone, flat areas of mark-making, the eraser technique is interesting – dark and light contrasts, the tonality, dark and light, works very well
- **The use of media is comprehensive** – the way he's used the pencil creatively
- Choice of subject-matter is comprehensive, not like an adolescent's, it's creative, it goes beyond the norm – **he's juxtaposed different images. I don't know how it came about but it's interesting. It's got a Rauschenberg-Warhol feel, but it's all taken from the same experience, whether from photos or magazines or whatever. The selection of images is eclectic, it makes visual sense.**

Weaknesses

~ There's a compositional element that's a problem, he hasn't embraced devices that he could have – **for example the disappearing check pattern, the one-point perspective, is a bad device (sh). The mountain behind this building is very flat (sh image of school building). There's fine detail on the building, while the mountain is heavy with single-tone contrast. This badly-drawn wood doesn't pull together (sh lines representing wood-grain).**

Strengths and weaknesses in the exhibition of the top-achieving learner experiencing pedagogy 2B (the exhibition was awarded 80%)

Strengths

~ **distinct style, individual style**
~ **very good handling of paint and colour** – it's very painterly, she/he feels confident with paint – you can see he feels confident with paint. **The juxtaposition** [of colours] **is very interesting, they work together although they shouldn't**
~ **one can see his process** – lots of experimentation, the way he placed colours next to each other, he experimented until he found the correct combination. He also experimented with shape – until he got it right
~ **the imagery is abstracted in a very experimental way** – you can still recognise bits here and there (sh), when the rest of the picture is abstract
~ **the way he understood or created depth** – only through colour, it takes you in (gest) [use of colour draws the eye into the picture]. There's movement in the pictures, lots of movement: it guides you through the painting, your eye, there's no real focus but you move around and end up where you started, it brings you inside.
~ **especially for technical skills** – what I've said

Weaknesses

~ **It's technically very good but it lacks something. They become: I have a problem judging: should it have content or is it okay for the child to have fun with the paint?**
~ **This one** (sh abstract picture with suggestion of eye) **and this** (sh abstracted landscape) **is exquisite, I can read a thousand things into it. But this one** (sh completely abstract picture) **leaves me stone cold**

Strengths and weaknesses in the exhibition of the top-achieving learner experiencing pedagogy 1A (the exhibition was awarded 90%)

Strengths

~ **Technical ability, evidence of high technical quality. Advanced in terms of technical process, development of technical process** – they used monoprints

effectively. They used line and broad tone – it's an exciting combination of strong contrasts and exciting composition. Drawing ability is strong

- **The selection of imagery goes beyond the standard adolescent imagery , it's very personal** – for example if you look at this (sh composition with boat): the view of the boat and the seated figure (traces forms), it makes an interesting composition, it's holistic, the space and design work well. This is an exciting composition (sh composition with figures and house). I like the way Adam and Eve are contained in this one (sh)
- **It's fairly original**
- **It's mature** – all the things I've been talking about

Weaknesses

- **The exhibition itself: the person could have used colour, could have made coloured images or coloured the imagery. The scale and format could have been more interesting** – there's a lack of experimentation – with scale and format

Strengths and weaknesses in the exhibition of the top-achieving learner experiencing pedagogy 1B (the exhibition was awarded 90%)

Strengths

- **Technical skill, with a combination of strong content** – technical skill: expressive use of colour, shows African influence – use of colour and composition, she's not afraid of putting colours together in unusual ways. Weird angles or perspective, although that's possibly because she doesn't understand perspective. For example this is a stunning picture (sh image of yellow room, points to recession lines): look at the way the lines hold each other in place, it's correct in the picture. Each links parts, they hold the picture together: if you took any of them away it wouldn't look right.
  The mark-making is very expressive, the child moved around as she was drawing. There's lots of movement, this doesn't happen in this picture (sh 'Western-style' landscape)
- **Strong content** – mood-wise, in every picture there's a very distinct mood.

Weaknesses

- **Lack of structure**
- **The child wasn't exposed to drawing enough, her drawing's not very good** – for example, proportions.
- **I think this is the weakest picture (the 'Western-style' landscape), here I'm sure the pupil was forced to paint in a Western way.**

APPENDIX 9: EXAMPLES OF CODED PEDAGOGY

Coded pedagogy of the two teachers whose classes achieved the highest mean grades in the sample over the four years of the study, 3A and 1A, are shown below. Learners experiencing 3A had the highest average social class of learners in the study, and those with 1A, the lowest. Since the importance of specific demographic details was not known at the start of the study, learners' social class, race, and gender details were collected wherever possible. These details were noted and added to transcripts: in the extracts below teachers are noted as T: and learners (L) as "male" (M), "female" (F), "black" (B), "white" (W) or "coloured" (C).

PEDAGOGY 3A

SELECTED TRANSCRIPTS

13.5 minutes of introduction to/discussion of the observed project, in two parts
95 minutes of the planning/doing phase of the observed project from two lessons
17 minutes of whole-class summative criticism from two sessions

Note: Transcripts have been taken from several observed projects as the teacher became seriously ill three years into the study when all that remained of the data collection was observation of all phases of a single project. Introductory, planning/doing and criticism transcripts have been taken from three different grade twelve projects and supplemented with one grade eleven planning/doing lesson and one grade ten summative criticism session to make up time periods comparable with those of other pedagogies in the study. Assumed continuity in pedagogic features was based on the consistently high grades of this teacher's learners over four years despite the varying demographic character of the student body, and the general impression created during classroom observation over a period of two years.

POWER RELATIONS

CLASSIFICATION OF DISCOURSES

Classification of discourses: 'consecrated'/'unconsecrated'

Pedagogic feature 1a. **Two- and three-dimensional art displays on walls and open areas in the art classroom and school** (data source: observation notes)

School 14 was an art centre providing courses in a wide range of disciplines within the visual arts (including drawing, painting, sculpture, photography, printmaking, graphic and textile design, history of art, and others). It served state and private schools and individuals of all ages, running afternoon lessons in accordance with formal state syllabi for secondary school visual art curricula, for learners doing visual arts as subjects not offered at their schools.

Classroom walls in the area used by the teacher in the study, like others at the centre, displayed constantly changing arrays of completed and in-progress works by learners from different classes. Although these showed a small range in terms of levels of technical proficiency, overall skill levels tended to be very high. Leading up to and just outside the classroom were a roomy entrance hall, wide wooden staircase and open area, all of which were continually used as exhibition spaces for high-quality works by learners or local artists. Learners were thus exposed to consecrated art on a daily basis. The centre itself operated in and around a large double-storey century-old Edwardian mansion, built by well-known architect John Parker. No work lacking in skills or popular art was seen on display.

Classification: C + +

Pedagogic feature 1b. **Visual materials stored but available for use by learners, in the art room and school library** (Data sources: observation notes; interviews with librarians/teachers)

The teacher stored a large collection of unusual and visually striking man-made and natural objects, and photographic reproductions of a wide variety of categories of things, in the classroom for use as reference material in practical lessons. The actual objects sat on open shelves and both items and reproductions were available to learners on request.

A room opposite the observed classroom housed the centre's library of over 3000 books, journals, magazines, pamphlets, posters and videos. Books covered art movements and styles, ranges of theoretical issues and different art disciplines, technical information, source material imagery, monographs, and topics of general interest to art-makers. There were over 200 miscellaneous art journals, over 200 magazines, over 400 clippings and articles filed in booklet form, over 1000 folders of source imagery filed under specific topics, over 50 art videos, hundreds of art posters, and six sets of general art history textbooks with sufficient copies to supply all learner in any given class. A librarian manned the library and with the teacher's permission learners could both make use of it and a photocopier at a far end of the room.

A sum of R10 000 was available annually for the purchasing of books and teachers were encouraged to submit requests to the librarian to facilitate this.

Classification: C + +

Pedagogic feature 1c. **Direct reference to consecrated visual materials by the teacher, verbally and/or visually, when introducing/facilitating the carrying out of a project** (Data sources: teacher interviews and transcribed texts of selected lessons in the observed project)

In the teacher's recount of projects she made reference to consecrated materials in five (40%) of nine instances, showing learners imagery in books or taking them to actual exhibitions. She mentioned Cubist landscapes; an exhibition of African masks; and books on masks, early twentieth century paintings inspired by primitive art, still-lifes by seventeenth century Dutch and current South African artists, Futurist paintings, and tribal totem sculptures.

In individual interactions in observed lessons the teacher continually referred to visual material, much of which was photographic and some consecrated visual material. She said to a learner creating an image of an animal carcass, for example, '... I've got a book there with a few Bushman pictures actually – here ... but you can look in the library (across the passageway) too ...'. When another was working on composition, the teacher suggested adding an African cultural object or textures, saying '... Look for the ... African books ... Look through here, you might find something ...'. And to another trying to create the feeling of a museum:

T: ... You could actually create the feeling of the museum here ... like an auditorium ... Have you done history of art – do you know the Guggenheim Museum?
WML: Yes
T: That type of feeling, very spatial ... (the teacher fetches a picture of the Guggenheim Museum from the library across the passage)

Classification: C +

Pedagogic feature 1d. **Degree of exposure of learners to current original art in 'consecrated' institutions such as non-commercial galleries and studios** (Data sources: teacher interviews; learner questionnaires)

The teacher arranged visits and transport to consecrated galleries twice in the period under observation. All learners barring one who joined the class late attended at least once, and just under half (44%) went thrice or more times with the history of art or other teachers at the art centre. Most learners visited 'consecrated' galleries outside school hours on their own: 56% did so once or twice a year; 6% did so three or four times, and 19% five or more times. Some 19% of learners did not visit 'consecrated'

galleries outside of school on their own. Taking all visits into account, over half (56%) of the class visited consecrated exhibitions over five times in the period under observation; 19% three or four times, and the remaining quarter once or twice. All learners were however almost continually surrounded by exhibitions at the art centre.

Classification: C + +

Pedagogic feature 1e. **Learners' exposure to history of art in the classroom** (Data sources: class lists; observation notes; learner questionnaires and interviews)

In 2001 and 2002 respectively, 29% and 25% of learners did art on the higher grade, with the remainder registered for 'drawing standard grade'. Art history lessons were given separately by a specialist history of art teacher at times outside practical lessons.

For item 21 in the learners' questionnaire asking for recognition of ten art movements/styles and naming/describing a connected artist/image, the highest possible total score was '10'. At school 14 in 2002, learners on average recognized/named/described four art movements/artists/images, a score characterized as 'moderate'. Some (19%) scored '7 plus' (a 'high' score), most (56%) '3-6' (a 'moderate' score) and some (26%) under '3' (a 'low' score).

Classification: C - -

Intra-disciplinary classification of discourses: different 'art languages' referred to by the teacher

Pedagogic feature 2a. **Reference to different art 'languages'/styles by the teacher in practical art lessons** (Data sources: teacher interviews; transcripts of observed lessons in the observed project)

Practical projects done over the final two years of secondary school and described by the teacher in an interview with the researcher included reference to the following styles: realism, Cubism, early twentieth century styles inspired by primitive art (Fauvism, Expressionism, Symbolism), Futurism, seventeenth century Dutch still lifes, current work influenced by Expressionism, Impressionism, and Surrealism, a range of tribal totem sculptures and African masks, and Abstraction.

In two of the observed projects the teacher referred generally to symbolist and expressionist ways of working, saying for example: '... the protea(s) ... they take on their own symbolism, of the sun ...'; '... the aloe may be seen as a national symbol ...'; '... those are all symbols of how you've changed ...'; and '... don't look at them ... observationally ... you must look at the feeling that they have ...'; '... and I want you to think of other ways – and in an expressive way, to draw ...'; '... create different moods ...'. In one she also referred to realism and abstraction: 'make a realistic frontal self portrait ...' and '... you may work in a realistic or abstract manner ...'.

Classification: C - -

CLASSIFICATION OF TEACHER-LEARNER SPACES

Pedagogic feature 3a. **Teacher-learner use of space in art making lessons** (Data source: observation notes)

The teacher spent almost all of the lesson time amongst individuals, advising and being approached by them. Individual teacher-learner interactions, lasting between a few seconds and about ten minutes with most mid-way between, occurred almost continually. In the 'doing' phase of the project the teacher interrupted the class as a whole only briefly, for administrative-type announcements. In some lessons the teacher was observed spending relatively short periods on one side of the classroom, carrying out routine tasks such as mounting artworks or preparing materials, often when she had spoken at length with all individuals in the class and they were engaged with work, not needing advice.

Classification: C - -

Pedagogic feature 3b. **Teacher-learner interaction time** (Data source: transcripts of selected lessons in observed projects)

There were 48 distinct teacher-learner interactions in 95 minutes of the planning/doing phases of observed projects, 8 (17%) of which were coded of 'medium' duration and 17 (35%) as 'long'. Overall, 52% of interactions were more-than-brief.

Classification: C -

CLASSIFICATION OF LEARNER-LEARNER SPACES

Pedagogic feature 4a. **Learner-learner use of space in art making lessons** (Data source: observation notes)

Individual tables were pushed together into long parallel rows filling the room. Learners arranged themselves along these. In the planning / doing phases of observed projects they worked individually, interacting and moving occasionally into the spaces of those nearest them and across the room for work-related purposes.

Classification: C +

Pedagogic feature 4b.**Utilisation of materials by learners in art making lessons** (Data source: observation notes)

Each learner owned a substantial kit of art materials purchased from the teacher. When they needed extra supplies, the teacher provided these for a small fee. The teacher provided additional project-specific materials such as inks, and a variety of chalks and crayons, communally. A range of papers and equipment such as scissors were also available communally on request. In the observed project learners were only occasionally seen borrowing basic items such as erasers, from each other.

Classification: C +

CLASSIFICATION OF AGENTS

Pedagogic feature 5a. **Degree of separation of learners** (Data sources: observation notes; transcripts of selected lessons in the observed project)

Some 42 (88%) of 48 teacher-learner interactions in 95 minutes of the planning/doing phase of observed projects involved the teacher and individual learners, while six (12%) had more than one learner. Some of the latter interactions – usually work-related discussion – involved the whole class, while others – usually regulative communications – involved one or two learners. Examples of interactions with typical learner classifications follow.

1. INTERACTION WITH TEACHER AND INDIVIDUAL LEARNER

WFL: How do I do it (use ink wash technique) – the paper's all wet and I can't work on it at the moment
T: You need to wet the paper and let the ink wash over – and darker here (points on drawing), not pencil crayon, ink
WFL: Okay
T: Okay?
WFL: All right
T: So it's almost like darker from this side ...

WFL: I'm gonna wait until the paper's dry – what colour should I make this side, or should I cut this guy off?
T: No I don't think so
WFL: Okay (indistinct)
T: What do you see beyond the water – are there any examples in here (referring to books)
WFL: No... (indistinct)
T: What're you going to do here (points on drawing)?
WFL: I'm gonna put a couple of whales here, and some skeletons – here (shows image in source material book). The water's gonna have to be worked on though, 'cause it's very bare – I want it to be like – lines (shows)
T: Do you want it to be under the water?
WFL: Ja
T: So you've actually got to stain over it
WFL: Noooo!
T: Because otherwise it'll look as if it's extended
WFL: That's okay
T: But then you must specifically extend it
WFL: Like I did here
T: Ja
WFL: All right
T: You should have put it on card, then you could have –
WFL: Ja, I don't like the card
T: Ooh jinne! (laughs)
WFL: I'll do it, it's not that difficult
T: Extend it – I don't know – can you extend it above?
WFL: I don't know, it could be like card (shows)
T: 'Cause like in the museum, then you could actually do like in the museum – yes! There's a good one – a viewing space like in those viewing windows, the museum behind – so you'd create a completely different atmosphere. It was – it's part of the past. And that goes in front of this here (shows)
WFL: What does the viewing window do?
T: You could actually create the feeling of the museum here ... you know sometimes in a museum you get like a rounded structure like that (shows)
WFL: Ja
T: Like an auditorium
WFL: Ja
T: And this thing is hanging on the auditorium. I'm not sure what you'd see
WFL: Then what's this doing then (points on drawing)?
T: Then this is like the real world
WFL: Then what's the auditorium doing hanging around in the background?
T: This is where this came from, it's not part of the past (pointing on drawing)
WFL: Do you want me to put – can I put like the auditorium off to one side?
T: Yes
WFL: So it's asymmetrical
T: Yes yes
WFL: Put it there so it sort of curved around that (points on drawing)
T: Have you done history of art – do you know the Guggenheim Museum?
WFL: Yes
T: That type of feeling ... (etc)

2. INTERACTION WITH TEACHER AND SMALL GROUP OF LEARNERS

T: (To two learners chatting and not focused on work) You two come, I'm coming there now!

Classification: C + +

CONTROL RELATIONS

REGULATIVE DISCOURSE: HIERARCHICAL RULES

Pedagogic feature 6a. **Learners' entry to/exit from the classroom** (Data sources: observation notes; transcripts of selected lessons from the observed project)

Learners entered the classroom freely as they arrived without or without school uniforms, arriving from various schools attended for conventional school hours and greeting the teacher individually. Most began working without prompting and a glance or brief reminder from the teacher sufficed to start others. Being at the art centre was seen as a privilege and learners agreed upon selection for entrance to classes, to abide by a code of conduct first and foremost in which was commitment to work. There were no bells and the teacher called attention to imminent lesson endings at allotted times, encouraging learners to restore working environments. Learners left individually once they had tidied, greeting the teacher as they went. Some left immediately while others took several minutes to finish working and tidy up: the atmosphere was informal.

Transcripts of two lesson beginnings and endings, followed by characterization of regulative comments within these, are given below. Characterization of regulative comments is in italics in square brackets after the comments.

LESSON 'A', planning/doing phase: START OF LESSON
[Learners entered the room as they arrived, sitting and interacting quietly amongst each other. At the appointed lesson starting time the teacher called them to the front of the room for a technical demonstration]

T: Okay can you all just come here a minute[*request*]? Um you have today, tomorrow, and two other lessons left
L: Aah-haah
T: And then there is one lesson before, but you should basically be finished then because your marks are in by the ... which means that your themes must also progress quickly – Yes? [*statement*] Okay ... I said to you, I want you, okay I insist, I want you to experiment with other media ...

LESSON 'A', planning/doing phase: END OF LESSON
[Five minutes before the end of the lesson the teacher drew learners' attention to the fact and encouraged tidying of the room, addressing the class as a whole]

T: Okay there's lots of tidying up to be done – brushes to be washed, inks to be put away [*statement*]. Roberta just bring me those blue scissors please [*request*]. Just make sure you wash those brushes off really well hey, otherwise they can never be used again [*statement*].
L: Ja
T: Okay everything must come off the tables ... [*statement*]. Monica will you pin up your drawing next to Roberta's – we can have a look at it and see if it's finished . There. Next to Roberta's. Any other white crayons [*question*]? It's not going time yet – stay in the classroom until we're tidy [*command*]. 'Birds of the World' needs to go back to the library ...[*statement*] Can you empty that [*request*]?
L2: Ja
T: Are those somebody's scissors?
L3: Mine
T: Okay, if you've cleared up, you may go [*statement*]. Please, you need to work hard tomorrow – you need to work hard, full stop, to get this finished in time ... [*request*]. And Simpa – you don't want any of these?
L4: Yes I do!
T: Okay ... And just listen all of you [*command*] – I almost forgot – instead of getting paper crumpled, you can use these to take drawings home in. You can always cut it shorter of you want to. Okay? There're a couple – there're more in the roof so you can get more tomorrow ... whoever else wants, you can get more tomorrow.

LESSON 'B'5, planning/doing phase, START OF LESSON
[Learners entered individually as they arrived and took work out, interacting quietly with each other as they did so]

T: Okay um – okay just sit down please [*request*]
L1: Why are we having a radio today?
T: It's not a radio, it's a recorder
L1: Oh!
T: Of great words of wisdom
L1: Oh like recording ...
T: Yes – Heidi is doing research ...
L2: So we've got to keep quiet today
T: No she won't ... What I need from you people ...

LESSON 'B', planning/doing phase, END OF LESSON
[The specified lesson-ending time arrived and learners packed up and left as they were ready, saying 'bye' to the teacher as they left. Others carried on working up to ten minutes after the end of the lesson].

Fourteen teacher comments were characterized as regulative in the above extracts. Of these, 11 (79%) and three (21%) were said to suggest horizontal and hierarchical social relations respectively.

Framing: F - -

Pedagogic feature 6b. **Control of talk** (Data sources: observation notes; transcripts of selected lessons from the observed project)

In 95 minutes of the planning/doing phases of observed projects, 48 distinct teacher-learner interactions were identified. Some 33 (69%) of these were characterized as open and learners also said more than the minimum ('mmm', 'I will sir', 'okay', 'I'll do that now') in 33 (69%) of interactions and made 'elaborated' (over ten-word) interjections in 16 (33%). Examples of typical interactions are shown below.

The teacher spent almost all of the observed lesson time interacting with learners, opening dialogue in most interactions, many of which were relatively lengthy, as shown in the following extracts.

T: That's quite interesting there (points on drawing) – that looks like the insides of him – the person.
WFL: I need to put something there, his cloth
T: Mmm?
WFL: His cloth – he's wearing like a skin
T: Looks like his bones, this side – is that his bones? Is that his shoulder?
WFL: Ja that's his shoulder
T: Mmm
WFL: And –
T: That's his cloak
WFL: Ja
T: That needs to be darker, to be behind (points on drawing), virtually behind. You know, that actually works as his throat and heart
WFL: Mmm
T: Hey? (smiles) In a way (looking at drawing) – what does it – doesn't this look like the inside of him?
WFL: Ja (smiles). Part of his shoulder is like – in
T: Mmm (looking at the drawing)
WFL: (indistinct)
T: Just think of – you might want to integrate the brown slightly more, into the skin
WFL: Mmm
T: Of the face – okay? Um – the carcass – can become a thing which is also it can be suspended over, or it can be drawn into there, okay? It can also extend out if they're carrying it – it depends where it goes to, how far it goes to –
WFL: I was thinking – I wanna include some – I wanna draw some bushman drawings on the wall –
T: So it's actually –
WFL: For some atmosphere

T: So it's in a cave rather
WFL: Ja
T: You can do that –
WFL: I wanna do them sitting around a fire or something like that
T: Mmm. Ja. That you could do – you could have like a darkness here, on the inside here (points on drawing)
WFL: Mmm
T: The fire (pointing on the drawing) and then sort of you know – a little bit of light – lit up there
WFL: Ja
T: And part of the carcass there, you know, lit up (points on drawing) – only part of it
WFL: (nods)
T: I've got a book there with a few – um – bushman pictures – here actually
WFL: Okay
T: But I mean, you can look in the library too – I've got, you know, a few figures and so on
WFL: Mmm. Mmm. Okay

T: Um – have you thought now, of what you're going to do?
WFL: What d'you mean? (laughs)
T: No – have you thought about the whole thing?
WFL: I dunno, it just comes to me, what I'm gonna draw
T: And your bones?
WFL: I don't have any bones!
T: No, but you've got to have bones in it – there's got to be an element of bones in it
WFL: Oh. Mmm. Look at hers (a learner in close proximity has no bones in her drawing)
T: Ja – she's not finished, she's going to put a whole skeleton in
WFL: Oh I dunno, I'll put some in somewhere

WFL: How do I do it (use ink wash technique) – the paper's all wet and I can't work on it at the moment
T: You need to wet the paper and let the ink wash over – and darker here (points on drawing), not pencil crayon, ink
WFL: Okay
T: Okay?
WFL: All right
T: So it's almost like darker from this side ...
WFL: I'm gonna wait until the paper's dry – what colour should I make this side, or should I cut this guy off?
T: No I don't think so
WFL: Okay (indistinct)
T: What do you see beyond the water – are there any examples in here (referring to books)
WFL: No ... (indistinct)
T: What're you going to do here (points on drawing)?
WFL: I'm gonna put a couple of whales here, and some skeletons – here (shows image in source material book). The water's gonna have to be worked on though, 'cause it's very bare – I want it to be like – lines (shows)
T: Do you want it to be under the water?
WFL: Ja
T: So you've actually got to stain over it
WFL: Noooo!
T: Because otherwise it'll look as if it's extended
WFL: That's okay
T: But then you must specifically extend it
WFL: Like I did here
T: Ja
WFL: All right
T: You should have put it on card, then you could have –
WFL: Ja, I don't like the card
T: Ooh jinne! (laughs)
WFL: I'll do it, it's not that difficult
T: Extend it – I don't know – can you extend it above?

WFL: I don't know, it could be like card (shows)
T: 'Cause like in the museum, then you could actually do like in the museum – yes! There's a good one – a viewing space like in those viewing windows, the museum behind – so you'd create a completely different atmosphere. It was – it's part of the past. And that goes in front of this here (shows)
WFL: What does the viewing window do?
T: You could actually create the feeling of the museum here ... you know sometimes in a museum you get like a rounded structure like that (shows)
WFL: Ja
T: Like an auditorium
WFL: Ja
T: And this thing is hanging on the auditorium. I'm not sure what you'd see
WFL: Then what's this doing then (points on drawing)?
T: Then this is like the real world
WFL: Then what's the auditorium doing hanging around in the background?
T: This is where this came from, it's not part of the past (pointing on drawing)
WFL: Do you want me to put – can I put like the auditorium off to one side?
T: Yes
WFL: So it's asymmetrical
T: Yes yes
WFL: Put it there so it sort of curved around that (points on drawing)
T: Have you done history of art – do you know the Guggenheim Museum?
WFL: Yes
T: That type of feeling ... (etc)

The relatively small number of interactions not actively opened by the teacher usually consisted of regulative or instructional imperatives or 'administrative-type' dialogue, as illustrated in the following extracts.

T: Er Mark, you need to leave Shirley alone now, and to focus and concentrate
WML: Miss I'm further than a lot of these people
T: No, you've still got lots to do – all those negative spaces

T: (To the whole class) Okay remember it's got to have an element of bone in it ...
WFL: Bone?
T: Ja, bone – this whole thing revolves around that, the connection of this (referring to the connection between whatever topic learners selected, and bones)

WFL: I need charcoal
T: We've got some charcoal somewhere – the key's on here (gives keys to learner)
WFL: And chalk
T: Chalk should be in that cupboard there (points)

Framing: F -

Pedagogic feature 6c. **Regulative mode** (Data sources: observation notes; transcripts of selected lessons from the observed project)

The most frequently occurring regulative mode in interactions included explicit art norms with inter-personal/art-positional comments, followed by those with implicit norms and inter-personal/art-positional communications. There were very few interactions in which social norms were explicated and some in which social-positional or imperative communications used.

The following table shows percentages of interactions with particular regulative modes.

	Learner transgression + inter-personal / art-positional teacher comment	Learner transgression + social-positional / imperative, or mixed-mode teacher comment
Norms implicit/art norms, with or without implicit norms	65%	21%
Social norms or mixtures of art and social norms, with or without implicit norms	Nil	15%

Examples of interactions with typical regulative communications follow.

1. INTERACTION WITH ART NORMS AND INTER-PERSONAL/ART-POSITIONAL COMMENT

T: Okay you haven't got that like – you need to get into the depth of it (makes a 'down into' gesture) – like you've got a focus there, and a light (points on drawing) – um you can darken ... [*art norm; inter-personal comment*] I think that some of this could be slightly broken with bits of brown and black so it becomes – um –
WFL: (Indistinct)
T: Sweet succulent but also like deadly, and that contrast of black, of strong navy – like intense blacks on the mushroom so it has more of a deadly feeling there
WFL: Mmm
T: And then here also (points on drawing) – you need to be sucked into that throat (of the plant) – okay? So you need darker colours ... [*art norm; art-positional comment*] Um I think you can still – this figure's quite organic and nice, but I don't think it's finished. I think it needs more earth tones, um – and to be worked and possibly already starting from there, like from the bark into there, and then into like some of this, what's happening, starting to happen there needs to happen more, a little bit more into there (pointing on the drawing) ... so that you transform that and then you can bring some, also some linear work into here (points on drawing) – elaborate and carry on with some of that feeling ...
WFL: I wanted to maybe cut this out to make a shape
T: Mmm-hmm
WFL: But I didn't know if you would like that
T: No not if I would, if you would like that idea (smiles) [*art norm; art-positional comment*]
WFL: I didn't know what it should be
T: ... It sort of tends to hang from that shape onwards, um – you're gonna have to think about ... if you want anything, any dominant um image in that (points to area in drawing) – this could also be something quite interesting in terms of like um I dunno – what was that?
WFL: It was a picture of a girl ...
T: It almost becomes ... that form echoed again
WFL: Ja
T: I'm just, I don't know, think about that. You might want it to be ... Do you want it to look like a girl with a parasol? Do you want it to be – to have the feeling of being see-through?
WFL: Okay I'll think about that (smiles)
T: You've got to think – do you want it very bright and dominant?
WFL: I dunno, I think I must tie up all the colours
T: Ja, start with the colours and tie it up through there ...

2. INTERACTION WITH IMPLICIT NORMS AND INTER-PERSONAL/ART-POSITIONAL COMMENT

T: Do you want to cut some of this away?
WFL: Cut off what?
T: I dunno – this here (points on drawing). You see I suppose it would work better if it was darker you know? If it was more included as part of a figure there (points on drawing)
WFL: Maybe I can do like when it's finished
T: Okay

3. INTERACTION WITH IMPLICIT NORMS AND SOCIAL-POSITIONAL/IMPERATIVE COMMENTS

T: (To learners conversing and not working) Okay listen – you two must go away from each other
WML: Okay bye
WFL: Okay
T: You're not good for each other

Framing: F -

Pedagogic feature 6d. **Initiation of teacher-learner dialogue** (Data source: transcripts of selected lessons from the observed project)

In 95 minutes of the planning/doing phase of the observed project, there were 48 distinct teacher-learner interactions, 34 (71%) initiated by the teacher.

Framing: F +

Pedagogic feature 6e. **Control of learners' focus on work and social interaction unrelated to work, during practical lessons** (Data sources: observation notes; transcripts of selected lessons from the observed project)

In 95 minutes of the planning/doing phases of observed projects, almost all learners worked steadily with little social interaction throughout. As soon as anyone visibly slowed working, the teacher drew their attention to work and time deadlines: social interactions without work were not permitted. Learners appeared to 'know the rules' and settled down to work, if not always with intense focus, after comments such as the following.

T: Okay – you all need to get a move on – as I said, it's today, tomorrow, and two lessons – you need to do some homework, this [project] needs to be got to a state of completion [said to the whole class]

T: Er Mark you need to leave Shirley alone now, and focus and concentrate
WML: Miss I'm further than a lot of these people
T: No, you've still got lots to do – all these negative spaces (points to areas on learner's work)

T: You two come! I'm coming there now.

Framing: F + +

Pedagogic feature 6f. **Balance of sound levels** (Data sources: observation notes)

Sound levels were not recorded in the 95 minutes of the planning/doing phases of observed projects selected for analysis, but are estimated to have been 'very quiet to low' tending towards being extremely low almost all of the time. This, together with the small size of the art room, almost continual circulation of the teacher amongst working learners, and the boldness of the teacher's voice, ensured that the teacher's voice was audible across the room almost all of the time.

Framing: F + +

INSTRUCTIONAL DISCOURSE: DISCURSIVE RULES

Pedagogic feature 7a. **Macro-selection of whole projects** (Data source: teacher interviews)

In the interview, the teacher described projects done by learners in the study over their final two years of secondary school. The teacher saw learners for one quarter only in the year preceding these: the art centre offered experimental – type courses for learners in the lower secondary school grades, exposing individuals to a wide variety of materials and processes, and requiring them to select four formally defined disciplines in the third last year, one for each of the quarters. On average two projects were done per term: all projects recounted by the teacher are presented below. Written project outlines, some of which are included in Appendix xyz, were almost always given. The teacher remarked 'it goes without saying' that 'technical skill' was sought after in all projects.

Grade 10 projects

Grade 10 projects were designed around introduction to and extended exploration of different drawing techniques and media. Project components were more specified and on a smaller scale than those in the higher grades. Learners were led through projects outlined below step by step.

A. 'Pegs': learners had to draw pegs from different perspective angles, expressing space and distance; insert pegs into backgrounds, concentrating on positive and negative spaces; draw something pegged, creating interesting associations.

B. 'Proteas': learners had to draw proteas from unusual angles, concentrating on atmosphere, brush-and-ink technique, and texture.

C. 'Green peppers': learners had to make tiny coloured-pencil pictures of green peppers on brown paper, focusing on contrast and form

D. 'Food': learners had to make realistic drawings of 'food in a box', conveying 'containment'

E. 'World of birds': learners had to portray 'the bird trapped'

Grade 11 projects

1. (a) The project: 'transformed still life'
   (b) What was said/shown in the introduction: learners had to make pastel drawings of a still life of bones and skulls set up in the classroom. Use of different colours to create different moods, and the setting of the still life in a landscape were discussed.
   Abstract Cubist landscapes were looked at. Learners were encouraged to transform the shapes of bones into 'interior' or 'exterior' landscapes.
   (c) What learners could select: ideas, composition, techniques, styles, atmosphere to be evoked
   (d) Evaluation criteria: conceptual outcomes – meaning beyond 'bone', or, very good observation of bones; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; handling of three-dimensional form; how they transformed the still life into something evocative, something with a particular mood/atmosphere

2. (a) The project: 'bones in a landscape' (see handout '9')
   (b) What was said/shown in the introduction: handouts were given. Learners were to visit a natural history museum and look at and sketch anything related to bones. They had to explore via sketching, formal contrasts, eventually combining selected elements and human/animal forms in realistic or abstract 'landscapes' in final works. There was discussion around ways of connecting different things.
   (c) What learners could select: imagery within the specified range, ideas, composition, media, size, techniques, styles, atmosphere to be evoked
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting using bones; the suitability of the technique to express the visual – the effect they wanted to create; wealth of selected visual information.

3. (a) The project: 'the masked you' (see handout '8')
   (b) What was said/shown in the introduction: handouts were given and discussions held around working with self-portraits and masking them in some way. The class was to visit a local museum and art gallery with large collection of African masks and make sketches of these. There was discussion of masks as disguises, personification of spirits, and ornamentation. Learners were encouraged to investigate animals represented; materials used; pattern, decoration and shapes in masks; and early twentieth century revolutionary art movements inspired by primitive art. Apart from collecting and documenting mask imagery, learners had to make realistic self-portraits and studies of other artists' self-portraits, combining all into final masked self-portraits in selected art traditions of their choosing. A learner asked how things could be portrayed 'on top of' portraits; techniques of working on overlaid transparent materials; cutting parts of two or more overlaid portraits away to reveal glimpses of others; and transforming parts of portraits two- or three-dimensionally were discussed, as was use of a variety of media.
   (c) What learners could select: imagery, ideas, composition, media, size within specified requirements, techniques, styles, atmosphere to be evoked
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; the suitability of the technique to express the visual – the effect they wanted to create.

4. (a) The project: 'fleeting impressions' (see handout '7')
   (b) What was said/shown in the introduction: handouts were given, learners were to travel up and down a seaside train route as a class, stopping off at stations of their choosing. They had to document general impressions and associations arising from these, noting recurring imagery at eye level and above, and then use these to develop ideas and themes. Having pursued various ideas and topics, they were required to select one, and return to and document in detail, scene(s) from which it was taken. Capturing movement in Futurist paintings was looked at. Process, imagery and use of media were discussed, as were potential topics such as 'blocking in events on an aerial view map'; 'design possibilities of uniforms, signals, signs ...', 'violence on trains', 'movement', 'windows/reflections'. A final work was to follow 'thinking sketches'. Learners had to texture their paper before creating final pieces, and create impressions of images shifting and moving
   (c) What learners could select: imagery, ideas, compositions, black and white media, techniques, styles, atmosphere to be evoked
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; the suitability of technique to express the visual – the effect they wanted to create; (creation of impressions of) speed and movement, direction of the viewer's eye through different images, black-grey-white contrasts, evidence of 'layering' built up with drawn, erased, and redrawn tones and textures.

Grade 12 projects

5. (a) The project: 'bugs/succulents' (see handout '6')
   (b) What was said/shown in the introduction: handouts were given, and bugs and creatures spoken about. The ideas of camouflage and visibility were discussed, and pictures of bugs, snakes, and tortoises looked at. Subjects had to be chosen for their evocative qualities. Discussion was followed by a class visit to botanical gardens where learners were required to make analytical drawings of succulents with the aim of recording them accurately, whether parts were drawn or whole items subjected to metamorphosis. Final works were to be developed from these drawings and themes such as 'the aloe as national symbol', 'a social landscape', or 'thorns as snares, traps, pitfalls – barring, restricting, confining, isolating'. The teacher demonstrated the use of several black and white media, mixing these in different combinations, drawing attention to texture and asking for experimentation with texture.
   (c) What learners could select: imagery, ideas, compositions, black and white media, techniques, styles, atmosphere to be evoked
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; the suitability of the technique to express the visual – the effect they

wanted to create; originality; different textural qualities –whether works were richly textured; evocative qualities of the insect or whatever

6. (a) The project: 'the feast' (see handout '5')
   (b) What was said/shown in the introduction: handouts were given, learners asked to create artworks of feasts, fantastical or traditional, observational or symbolic. They were to create feelings of sumptuousness. Different categories of food were discussed, and learners encouraged to select items for the latter's exciting visual qualities and specific relation to chosen environments. They were to choose settings they related to, create atmosphere and drama, and use colour evocatively for its suggestive qualities. They were given instructions for structuring their still lifes, capturing these from different angles and with different art elements, and making final artworks in which the identities of objects were altered and visual effects or evocations displayed. The teacher provided a range of books with images ranging from seventeenth century Dutch still lifes to those by current South African artists like Penny Siopis, for the class to look at.
   (c) What learners could select: imagery, ideas, composition, any colour media, size within specified requirements, techniques, styles, atmosphere to be evoked
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; the suitability of the technique to express the visual – the effect they wanted to create; originality; the visual delight of the feast – how it was unique and went beyond just being a representational drawing

7. (a) The project: 'totem in a landscape' (see handout '4')
   (b) What was said/shown in the introduction: the handout was given, learners were going to visit botanical gardens as a class and photograph/make descriptive notes on sculptures by Zimbabwean artists there, looking for works they identified with. They had to choose animals they related to currently and others symbolizing what they would have liked to become, designing a totem pole around forms they had chosen. Later they had to 'place this in an environment', in two- or three-dimensional artworks, considering different angles and moods and how they would make their ideas explicit to viewers. We looked at books showing the totems of different tribes, and learners had to do themes (written projects) on the history of what totems were about at the same time.
   (c) What learners could select: imagery, ideas, composition, media provided these were monochrome, size within specified requirements, techniques, styles, whether to work two- or three-dimensionally
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; the suitability of the technique to express the visual – the effect they wanted to create; how well learners were able to move from information they'd seen visually to transformation into a personal statement –learners handle 'just drawing' much more easily but this (transformation into the personal) is important for them and requires lots of stimulation, teaching, and asking them 'why did you choose that'

8. (a) The project: 'aquarium' (see handout '2')
   (b) What was said/shown in the introduction: the handout was given, learners were going to visit an aquarium, jot down ideas and sketches, anything they found interesting, and later select a topic, make 'thinking sketches' around the topic, explore compositional possibilities, and make a final work. Possible themes were discussed, like 'man's interaction with the sea and coastline, positive and negative', 'lighthouses and shipwrecks', 'sea life', 'pollution', 'above and below', 'microcosm/macrocosm', 'predators: menacing monsters', 'camouflage/lure: hiding and hunting', 'abstracted aesthetics – stripes, forms, transparency, colours, shapes, etc – divorced from the recognisable', and others. Learners were advised to work around themes rather than just creating pictures about fish.
   (c) What learners could select: imagery, ideas, themes, composition, media, size, whether to work in two or three dimensions, style, technique
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which learners went) the extra mile to put across something really exciting visually; the suitability of the technique to express the visual – the effect they wanted to create

9. (a) The project: 'mechanical objects' observed and used expressively (see handout '1')
   (b) What was said/shown in the introduction: the handout was given and worked through. Different types of techniques were described. Discussion was held around different objects that existed in and around the home, their structure and functioning, like 'whether they pushed or sucked', connections between objects, those with similar functions, and how they connected and made contrasts. No imagery was shown but setting scenes for plays, theatre, where objects were 'going to act out', were imagined. It was emphasized that learners should select objects they related to in some way, and found visually exciting.
   (c) What learners could select: objects, viewpoints, composition, techniques, media, message or feel, style, size over a certain minimum requirement
   (d) Evaluation criteria: connections made – conceptual outcomes, or, very good observation; technical skill; (the degree to which images were) visually exciting; the suitability of the technique to express the visual – the effect they wanted to create

Table 35: Summary of project details for Teacher 3A

School grade	Project name and focus	Selection of project	Selection within project	Reference materials provided by the teacher
10	A. 'Pegs'; perspective; associations	Teacher	View of object; associated objects; composition	Not known
10	B. 'Proteas'; mood; brush-and-ink techniques; texture	Teacher	View of object; composition; use of formal elements	Not known
10	C. 'Green peppers'; colour contrast; form	Teacher	Colours	Not known
10	D. 'Food'; the idea of containment; realism	Teacher	Objects; composition	Not known
10	E. 'World of birds'; the idea of 'trapped'	Teacher	Imagery; composition; technique; style; use of formal elements	Not known
11	1. 'Transformed still life'	Teacher	Ideas; composition; technique; style; formal elements; mood	Teacher-created still-life; books with abstract Cubist landscapes
11	2. 'Bones in a landscape'	Teacher	Imagery within specifications; ideas; composition; media; size within requirements; technique; style; mood; use of formal elements	Teacher took class to collect/sketch reference material in natural history museum
11	3. 'The masked you'	Teacher	Imagery; ideas; composition; media; size within requirements; technique; style; mood	Teacher took learners to mask exhibition at local gallery; showed books on masks and artworks by early twentieth-century artists inspired by primitive art
11	4. 'Fleeting impressions'	Teacher	Imagery; ideas; composition; black-and-white media; technique; style; mood	Teacher took learners on train journey to collect/ sketch reference materials; Futurist paintings
12	5. 'Bugs'	Teacher	Imagery; ideas; composition; black-and-white media; technique; style; mood	Teacher showed imagery of bugs and other animals, and demonstrated technique
12	6. 'The feast'	Teacher	Imagery; ideas; composition; colour media; technique; style; mood	Teacher showed books with range of still lifes from seventeenth century Dutch works to current paintings by South African artists
12	7. 'Totem in a landscape'	Teacher	Imagery; ideas; composition; colour media; technique; style; mood	Teacher took learners to botanical gardens to collect/sketch reference material; showed books with images of totems of tribes

12	8. 'Aquarium'	Teacher	Imagery; ideas; composition; media; technique; style; mood; size within requirements; two or three dimensions	Teacher took learners to collect/sketch reference material at local aquarium
12	9. 'Mechanical objects'	Teacher	Imagery; ideas; composition; media; technique; style; mood; size within requirements	None

From the above outlines and Table 35, it can be seen that the teacher selected projects in all instances. In learners' final exhibitions projects were identifiable to differing degrees, from almost all in some, to half in others.

Framing: F + +

Pedagogic feature 7b. **Micro-level framing of selection: selection of aspects within projects** (Data source: teacher interviews)

From the above project outlines and Table 35, it can be seen that learners had narrow selection in one of nine recounted instances. In the remainder of projects they could make technical selections and choose imagery and compositions within teacher-specified guidelines.

Framing: F - -

Pedagogic feature 7c. **Micro-level selection of sources of reference when planning/creating an artwork** (Data source: teacher interviews)

In project descriptions and Table 35 above, it can be seen that the teacher provided sources of reference in eight of nine projects done over the two final years of secondary school

Framing: F + +

Pedagogic feature 8a. **Macro-level framing of sequencing: sequencing across projects** (Data source: teacher interviews)

From project descriptions outlined above and in Table 35, it can be seen that in grade 10, projects were simpler than in the final two years, focusing on few features, single techniques and principles. Learners could select within a small number of tightly specified areas. By her own admission and judging from above recollections, the teacher treated grades eleven and twelve similarly in terms of project complexity. All projects required selection and relation of multiple features, from items of content and concept, to those of technique, style, and use of media and the elements of art. At the start of grade eleven content was specified more loosely than that in grade ten and more narrowly than that later in grades eleven and twelve. There was thus a simple but teacher-orchestrated increase in complexity from an initial period of exploration of few elements to an extended time in which multiple and complex items had to be combined by learners.

Framing: F + +

Pedagogic feature 8b. **Micro-level framing of sequencing: sequencing of components within projects** (Data sources: observation notes and transcriptions of selected lessons in the observed project)

In the main observed project four phases were identified: introductory; information and ideas gathering and processing; planning and doing, and criticism stages. The teacher outlined the order in which these were to be done in the introduction (extracts are given below), and enforced them through whole-class pacing and almost-continual monitoring.

In the not-observed initial introduction the teacher supplied and worked through a project handout (see handout '6'). Bugs and creatures were spoken about, the ideas of camouflage and visibility discussed, and pictures of insects, snakes, and tortoises looked at. The teacher emphasized choosing of subjects for their evocative qualities, and gave a whole-class demonstration of the use of several black and white media, mixing these in different combinations, drawing attention to texture and asking for experimentation with texture. The class as a whole was addressed and involved in all of these activities.

In the following (observed) lesson the teacher again addressed the class as a whole: an extract is given below.

T: (At the start of the lesson) I just want to go through what we're going to ... [the botanical gardens] for ... to get to the aloes and to the proteas, it's a long walk, so what we'll do is, we'll drive back to the middle section and walk from there ... You can choose what area ... If you're working with proteas you can work with colour and vibrancy ... you can introduce collage ... But ... either the aloes or the proteas, I want you to think ... Besides being interesting as plants ... try and bring ... (a) message across ... look at details ... (and what they) might represent for you ... So what you are going to do today, is you are going to just look and draw – observe ... I've asked you to bring a fineliner and a ballpoint pen ... I will take photographs and anything else you want you can tell me – we will take photographs. You've got today and tomorrow to get sketches. But try'n be selective about what you draw ... But I'd like you to make sure – try'n get them finished by the end of tomorrow. As I say, tomorrow make sure you come on time: we're going to ... [the botanical gardens] again. It's these two afternoons that we've got for that, all right? ... get your files, clips ... go down to the bus ...

The teacher transported learners to the site of their information and ideas gathering and processing, on two consecutive afternoons. In the third and further two or three lessons thereafter, works were planned and created. As learners neared completion of works, the teacher suggested they hang these on classroom walls for individual or group summative criticism. This was observed as follows:

T: ... Monica will you pin up your drawing next to Roberta's – we can have a look at it and see if it's finished . There next to Roberta's ...

All learners followed a set sequence of stages in the observed project, and similar sequences in those recalled by the teacher.

Framing: F + +

Pedagogic feature 9a. **Macro-level framing of pacing: pacing of quantity of work done** (Data sources: observation notes; transcripts of selected lessons from the observed project)

All learners had at least eight large (A1 and bigger) works; about half of the class had around twelve pieces. Two projects were done per term, each requiring several pieces of work including preparatory sketches and final drawings. According to the teacher deadlines were set and adhered to in the sense that new projects were begun and if learners had not completed work they had to then do so in their own time. Because of the lack of continuity in lesson transcripts it was not possible to observe the approach of a final deadline and the degree to which the teacher insisted on all learners submitting work, but her approach has been reconstructed from comments in observed lessons.

The teacher set deadlines for projects and reminded the class of these frequently rather than taking learners' paces into account, as exemplified by comments below.

1. T: Okay you all need to get a move on – as I said, it's today, tomorrow, and two (further) lessons – you need to do some homework, this needs to be got to a state of completion
2. T: All right, you've got today and tomorrow to try and get this finished ...

3. T: These need to be finished by tomorrow ...

4. T: Okay everything has to be finished by tomorrow ... The time has sort of gone and that. What I'll do later is take out your folders and go through your work with you ... Up to this stage you should have seven pieces okay? Seven good pieces ... So you must make sure that this is properly finished by tomorrow and that everything else that you wish to include for your marks ... that they are all finished and ready ...

5. T: ... Please make sure that you've got your things here tomorrow ... If you don't, it's simply 'nought' ...

The teacher also urged on individuals lagging behind their classmates, as shown in the following extracts.

6. T: (To a learner chatting and not working) Mark, you're not nearly finished ...

7. T: Um Andrea, you must work on a scale that you're going to like – finish
   L: (nods)
   T: Okay, you've a big piece of paper there and you haven't done very much, so you need to start focusing that. You need to finish what you're doing, okay. So you need to think if you're gonna use that whole piece of paper

8. T: Er Mark you need to leave Shirley alone now, and focus and concentrate
   WML: Miss I'm further than a lot of these people
   T: No, you've still got lots to do ...

There was some evidence that despite adherence to deadlines, some allowance was ultimately made for negotiation in that space was created for belated finishing of work:

9. T: ... All these are due tomorrow. By next week Tuesday, everything is up to date for the whole term. In other words your whole mark for the year will be based on everything ... You must get as much up to date. Anything that's outstanding you must get up to date. I will mark you on how I see everything.

Framing: F + +

Pedagogic feature 9b. **Micro-level framing of pacing: pacing within projects** (Data source: transcripts of selected lessons from the observed project; observation notes)

In the observed project, introductory, information gathering, artwork-making and criticism phases were noted. The first two were whole-class paced, the latter two individual. Introductory comments were addressed to the whole class. The teacher physically transported learners to information gathering sites in observed and recounted projects, places such as botanical gardens, an aquarium, a train journey, museum and gallery exhibition, where they could sketch. Once engaged in the making of artworks, learners worked at their own paces, receiving formative and summative criticisms at different times.

Within project phase deadlines were evidenced in transcripts in teacher comments such as '... you've got today and tomorrow to get sketches ...', and 'It's these two afternoons that we've got for that (sketching) ... get your files, clips ... go down to the bus'.

Individual pacing showed in teacher transcript comments like 'I would like you to – those who are finished – to start going through these', referring to completion of a current project and photocopied photographs of cacti and flowers, source material for a subsequent project, respectively.

Summative or late formative criticisms were some times given individually as in the teacher's call for discussion of two pictures as the rest of the class continued to work: 'Monica will you pin up your drawing next to Roberta's – we can have a look at it and see if it's finished. There. Next to Roberta's ...'. At other times all work was pinned to classroom walls and the teacher systematically commented on each, addressing the whole class.

Framing: F +

Pedagogic feature 10a. **Framing of evaluation criteria: extension of learner-selections** (Data source: transcripts of selected lessons from the observed project)

There were 48 distinct teacher-learner interactions in 95 minutes of the planning/doing phases of observed projects, 39 of which addressed learner selections. In 29 or 74% of these, the teacher extended learners' selections by adding suggestions of her own. Many of these interactions included affirmations and clarifications as well as extensions, and most included several extensions. A small number of the dialogues without extensions negated learners' selections without explanation, potentially extending these. Examples of interactions addressing selections follow.

1. L: Must I use a different colour?
   T: You could do [*affirmation*]

2. T: That's interesting [*affirmation*]

3. L: Miss I wanna do a collage, I wanna start again
   T: No. No – that's nice [negation of learners' selection]
   L: But I don't like it
   T: Hey?

4. T: This doesn't look real – maybe um just work with it – look at the skeleton and just – your shapes are a little bit too regular (fetches actual bone and points to learner's final drawing). This (drawing) is the skeleton of a person but it's the same basic ... (points to texture on actual bone)- okay? Not all smoothly regularly finished ... [*teacher extension*]
   WFL: Mmm
   T: Notice how they curve out and go in differently. So each one is slightly out – and one slightly thinner, one slightly thicker (points on actual bone). Okay what happens when something bends (shows on actual bone). You see how it comes from the back there and it comes from here like a cage and when something bends like a rib-bone, it ... twists over (draws on learner's preparatory sketch as speaks) [*teacher extension*]
   WFL: Ja
   T: ... To make it more interesting, the spaces between [the drawn ribs] are not all the same (pointing on drawing) ... So you've got to modify what you've drawn ... [teacher extension]. But now you've got to decide – you might want to cut it out and have it as ... (making a cutout like learner's drawing, with scrap paper as she speaks), it depends, I don't know what, or you might want to have things moving in, over it (threading additional paper through cutout as she speaks) ... So that some things are in front and some things move ... I mean one could like cut it and slip things through so that you keep the bone structure, but you move things in and out there – possibly [*teacher extension*].
   WFL: Mmm
   T: Or that you keep this white (pointing to part of learner's final drawing), and you stick it onto grey, and then you draw your things in grey and stick it onto there. Okay, and then you work into this with like yellows and ... dirty tones [*teacher extension*]
   WFL: Mmm
   T: So what I want you to try'n do is to get this skeleton finished ... So that you actually cut it out and use that as a framework. And to decide from there what you're going to have in between
   WFL: Cut that and slit through

T: Ja. Cut the actual skeleton part of it out ... And parts of it you can actually tear ... [*teacher extension*]. And then you can draw individual bones also, that move forward and backward. But you focus on different things ... You must first get a book on tides and plankton and ... things that grow up between here [*teacher extension*]

WFL: Like coral and –

T: Ja ... that you can do with ink. You can stain wet paper and then run the ink ... [*teacher extension*]. If you didn't want to cut it out and you wanted to do like a seaweed over it, on top of the white, you could do that first [*teacher extension*]. Try, so it's partly going over the skeleton and parts of it in-between. And after that you can think about bringing in fish – and different things ... There must be movement and rhythm [*teacher extension*].

5. WFL: I did all of these butterflies on here (shows teacher drawing with self portrait to the left of which is an area covered with butterflies) ... I dunno what I'm gonna do here in this space (points to area right of the portrait). I could have one wing (made up of little butterflies) and then this (similar area of butterflies) over on the other side

T: You've gotta think what you want to say ... those butterflies that you've got there are aspects of ... the butterfly is something that moves and it passes through and it's a symbol of change, rebirth, and so on ... And those are all symbols of, or photostats of symbols, of how you've changed. And moved on through time ... But they're the past. Then there're other symbols of what you are at this moment in your life. So there's got to be ... possibly some more recent information about yourself and things in relation to yourself ... [*teacher extension*]. And also there're things of ... developing things spatially and also in some sort of time sequence ... If you're going to suspend – you've got to think if you're going to suspend those (makes gestures indicating attaching images of butterflies in a layer above the rest of the picture) or mount them. Or if you're going to stick them down [*teacher extensions*]

WFL: I just did this because its easy – the butterflies on there

T: But you've got to think of why you're doing it there ... You need to think of opening up what it is you want to say about yourself. Whether you want to project yourself forward, whether you want to disguise yourself – remember you're supposed to be presenting yourself as a masked something. In other words it changes your identity. So you've got to decide – are you going to change ... the identity of that face as well? Is it going to go through from there into the background? That would be more meaningful. I mean you can think of some sort of metamorphosis. Like this (points to drawn nose in portrait) becoming the body of the butterfly – the nose – and from there, you know, the wings extending outwards [*teacher extensions*]

WFL: Mmm

T: And then the environment – are you a person that likes nature? Are you a person that doesn't like nature? Butterfly nymphs – we find them in beautiful places where nature abounds: you could do a contrast with your drawing, of city and barren spaces, and very lush areas. And you could possibly think of how ... even by bringing ... something transparent over it ... These eyes (points to drawn eyes in portrait) can become the eyes on the butterfly's wings. Okay? So I think what you need to do is to look at the complete forms – of a butterfly, and you need to think of how you can relate it (the portrait) to that. And even if you start working on transparent paper or it could be other paper – where you cut out things and reveal parts of yourself. And you can perhaps take that whole form thing and then think how you can work on top of that, and think of how you can link that (existing butterflies) – okay? [*teacher extensions*]

WFL: Mmm

Framing: F + +

Pedagogic feature 10b. **Framing of evaluation criteria: elaboration of criteria** (Data source: transcripts of selected lessons from the observed project)

With the 'introduction', 'doing' and 'summative criticism' phases being observed in different projects, evaluation criteria were analysed separately in each.

In introduction transcripts and handouts, both the idea behind the project and technical requirements, not always easily separable aspects, were clearly elaborated with a combination of visual examples together with both general and specific principles and procedures. Characterisations follow comments unless otherwise indicated.

Project aims in the handout were a mix of content and form-related requirements in various forms including '... to familiarize yourself with the structure ... of the plants ...' [*general principle*], instructing learners to '... observe carefully and then record them [plants] with accuracy' [*general procedure*]. Learners could 'enlarge or magnify' [*specific procedure*] parts of plants and subject them to 'a process of metamorphosis' [*general procedure*]. Drawings needed to 'explore through variation of position and size, the possibilities of shapes ... and ... unusual viewpoints' [*specific procedure*]. A set of general procedures such as using drawings 'in a formal way' for an abstract result, working in styles like Cubism and Surrealism for landscape studies, and creating symbolic still-lifes were presented (see handout '6', p.2).

In the verbal introduction the teacher also issued content and formal instructions as indicated in the following extract.

T: ... Besides being interesting as plants, try'n also think beyond that, okay? I've told you, the flowers are often found in stately homes ... They stand for something. Try and bring that message across. Whatever they stand for. As far as cacti go, try and think of them ... They've got all fingers and they've got snares, and if something were to get caught in them ... they work as a sort of trap ... Try and see them in that sort of sense – look at details of their thorns, look at details where they project ... So you can think of um – the aloes or the cacti – might represent for you some sort of trap ... whether it had a creature trapped in it , or it could become more, in a sense, political – olraait? Or in the same way you see every house barred with fences and with pointed spines and spikes and things, you could think of all those spikes relating back to the cactus ... A sort of contrast – they're very similar in way, they present the same thing. As well as cacti are, they work as reservoirs in drought areas, they suck water, okay? So they can exist in periods of drought. If you think of all our African states there are thousands of people there, dying of hunger, of lack of water, okay? There is a parallel. So you may work with poverty, with hunger-stricken people, you may introduce aspects of people, okay? Of drought, of bones ... So it doesn't have to stay only with the plants [*general procedures for working with ideas and verbal elaboration of examples of ideas*] ... So what you're going to do today is: you're going to just look and draw – observe [*general procedure*] ... I've asked you to bring a fineliner or a ballpoint pen [*specific procedure*]. You can get remarkable detail and the feeling of a cactus with a ballpoint pen [*general principle*] ... You can do a tiny little drawing ... you can fill the whole page – but they must be little jewels in themselves [*general principle*] ... Try'n be selective about what you draw [*general principle*] ...

and

T: ... just come around here ... Try and make it go beyond just being a pretty picture of cacti and um – proteas ... if you're working with the cacti, look at things of textures (points to areas of texture in photocopied examples of cacti and proteas) [*specific procedure with shown with visual examples in the required form*]. If you're working with the proteas ... your topic could be on different light conditions, okay? You could do a sequence of smaller pictures where you look at different light conditions ... don't look at them observationally. Don't look ... in terms of graphic design, where you stylize them ... You are people that draw. You must look at them, you must look at the feeling that they have. The way the light's cast on them. What's fluffy. What's thorny, what's this, what's that. And their contrast ... You can see I've blown them up so you get nice contrasts of light and shade ... close-ups ... and detail [*showing*]. And other blurred things in the landscape ... You can work from slightly furry and so on (shows

images of cacti and proteas). They go through a process of where they look very grand and where they start to decay, and they start to dry out (shows images of cacti and proteas) ... If you're working with the cacti, there're all different types (shows images of cacti and proteas) olraait? [*specific principles and procedures and shown examples in the required form*]. These are almost like barbs (points on images) or – um – if you think of those gates and things – okay" They have the same types of qualities. Um. (Shows images of cacti and proteas) It depends on what you want to work with. These have an interesting like radial feeling. And the thorns (points on images) ... There was also a tortoise there ... which was all dried out. So you can think of it in terms of making a statement about drought (points on pictures). In this folder there are some further pictures of er, what some artist did of them – people, okay here we go (shows pictures). As I said you can think more of ... the impoverished um cacti and things. They also grow ... in the Kalahari ... so you could include Bushmen with it. You can put in what you want – olraait? [*specific and general procedures for working with ideas, verbal elaboration of examples of ideas, showing of examples*] ... Look at them in terms of like ... drawing, design, line, textures ... negatives and positives [*general procedure*]. You get a variety – some which look like tortoises, some which look like stones ... others which have a much more flowery-like appearance (shows pictures) [*specific principle and shown visual examples in the required form*]. So the cacti are interesting in terms of their textural qualities [*specific principle*] ... And I want you to think of other ways, and in an expressive way, to draw, olraait? Don't go with exactly what you've always done before, okay? It's not ... the size of the work – you can do a series of drawings that relate to one another, or you can do one big drawing – that is entirely back to you. But I want you to start thinking about what you find interesting ... and start getting some ideas together [*general principles and procedures*] ...

In 95 minutes of the planning/doing phase of the observed project there were 40 distinct teacher-learner interactions in which evaluation occurred, 31 (78%) of which included clear aesthetic judgements. Examples of these follow.

1. T: Okay you've drawn your bird ... Those bits are nice [*unqualified approval*] ... Remember everything you see close up in front of you is larger and more real. Its feathers you see more clearly. As you go away, you see things slightly more blurred ... They don't become focused as much [*specific principle, clear without visual example*] ... And you need to think of what you're doing ... what's coming in here and what other creatures ... Where is your focal point in this composition? ... plan out what else you're going to do ...' [*general procedures and principles*]

2. T: This doesn't look real – maybe um just work with it – look at the skeleton and just – your shapes are a little bit too regular (fetches actual bone and points to learner's drawing) [*general principle and procedure, and specific principle clear without visual example*]. This [drawing] is the skeleton of a person but it's the same basic ... (points to texture on actual bone) – okay? Not all smoothly regularly finished ... Notice how they curve out and go in differently. So each one is slightly out – and one slightly thinner, one slightly thicker [points on actual bone]. Okay what happens when something bends (shows on actual bone). You see how it comes from the back there and it comes from here like a cage and when something bends like a rib-bone, it ... twists over (draws on learner's preparatory sketch as she speaks) [*specific principles and shown examples in the required form*]

   L: Ja

   T: ... To make it more interesting, the spaces between [the drawn ribs] are not all the same (pointing on drawing) ... So you've got to modify what you've drawn ... But now you've got to decide – you might want to cut it out and have it as ... (making a cutout like learner's drawing, with scrap paper as she speaks) – it depends – I don't know what – or you might want to have things moving in, over it (threading additional paper through cutout as she speaks) ... So that some things are in front and some things move ... I mean one could like cut it and slip things through so that you keep the bone structure, but you move things in and out there – possibly [*specific principle and procedure and shown example in the form required*]

   WFL: Mmm

   T: Or that you keep this white (pointing to part of learner's final drawing), and you stick it onto grey, and then you draw your things in grey and stick it onto there (pointing

on drawing). Okay, and then you work into this with like yellows and ... dirty tones [*specific procedures*]

WFL: Mmm

T: So what I want you to try'n do is to get this skeleton finished ... So that you actually cut it out and use that as a framework. And to decide from there what you're going to have in between [*general procedures*]

WFL: Cut that and slit through

T: Ja. Cut the actual skeleton part of it out ... And parts of it you can actually tear ... And then you can draw individual bones also, that move forward and backward. But you focus on different things ... You must first get a book on tides and plankton and ... things that grow up between here [*specific procedures and general principle and procedure*]

WFL: Like coral and –

T: Ja ... that you can do with ink. You can stain wet paper and then run the ink ... If you didn't want to cut it out and you wanted to do like a seaweed over it, on top of the white, you could do that first. Try – so it's partly going over the skeleton and parts of it in-between. And after that you can think about bringing in fish – and different things ... There must be movement and rhythm [*specific procedures, general procedure and principle*]

3. WFL: I did all of these butterflies on here (shows self portrait drawing) ... I dunno what I'm gonna do here in this space (points on drawing) I could have one wing [made up of little butterflies] and then this [similar area of butterflies] over on the other side

T: You've gotta think what you want to say ... those butterflies that you've got there are aspects of ... the butterfly is something that moves and it passes through and it's a symbol of change, rebirth, and so on ... And those are all symbols of, or photostats of symbols, of how you've changed. And moved on through time ... But they're the past. Then there're other symbols of what you are at this moment in your life. So there's got to be ... possibly some more recent information about yourself and things in relation to yourself [*general procedure and elaboration of idea*] ... And also there're things of ... developing things spatially and also in some sort of time sequence ... If you're going to suspend – you've got to think if you're going to suspend those (makes gestures indicating attaching images of butterflies in a layer above the rest of the picture) or mount them. Or if you're going to stick them down [*general principle and specific procedures*]

WFL: I just did this because its easy – the butterflies on there

T: But you've got to think of why you're doing it there ... You need to think of opening up what it is you want to say about yourself [*general principle*]. Whether you want to project yourself forward, whether you want to disguise yourself – remember you're supposed to be presenting yourself as a masked something. In other words it changes your identity [*specific principles*]. So you've got to decide – are you going to change ... the identity of that face as well? [*general procedure*] Is it going to go through from there into the background? [*specific procedure*] That would be more meaningful [*tacit comment*]. I mean you can think of some sort of metamorphosis. Like this (points to drawn nose in portrait) becoming the body of the butterfly – the nose – and from there, you know, the wings extending outwards [*idea elaborated*]

WFL: Mmm

T: And then the environment – are you a person that likes nature? Are you a person that doesn't like nature? Butterfly nymphs – we find them in beautiful places where nature abounds: you could do a contrast with your drawing, of city and barren spaces, and very lush areas. And you could possibly think of how ... even by bringing ... something transparent over it ... These eyes (points to drawn eyes in portrait) can become the eyes on the butterfly's wings. [*idea elaborated, specific procedure*] Okay? So I think what you need to do is to look at the complete forms – of a butterfly, and you need to think of how you can relate it [the portrait] to that [*general procedure and principle*]. And even if you start working on transparent paper or it could be other paper – where you cut out things and reveal parts of yourself [*specific procedure, idea elaborated*]. And you can perhaps take that whole form thing and

then think how you can work on top of that, and think of how you can link that (points to butterflies in drawing) – okay? [*general procedure and principle*]

WFL: Mmm

4. T: This is coming on quite nicely ... you're getting the feel of it now [*unqualified approval*]. And the marks can be slightly bigger here (points on picture) ... And a bit darker around the whale [*specific procedures*], you know, so it's not too sudden [*specific principle*]

5. T: You need to wet the paper and let the ink wash over. And darker here (points on drawing), not pencil crayon, ink. So it's almost like darker from this side, in there (points on drawing) [*specific procedures with visual showing*]

WFL: ... What colour should I make this side? Or should I cut this guy off?

T: No I don't think so. What do you see beyond the water – are there any examples in here (referring to a book)?

WFL: No ...

T: What're you going to do here?

WFL: I'm gonna put a couple of whales here and some skeletons, here (points in book) the water's gonna have to be worked on though, 'cause it's very bare, I want it to be like lines

T: Do you want it to be under the water?

WFL: Ja

T: So you've actually got to stain [*specific procedure*]

WFL: No-o

T: Because otherwise it'll look as if it's extended [*specific principle*]

WFL: That's okay

T: But then you must specifically extend it ... You should have put it on card ... extend it can you extend it above ... 'Cause like in the museum ... you could actually do lines in the museum ... There's a good one: a viewing space like those viewed windows, the museum behind, so you'd create a completely different atmosphere. It was – it's part of the past. And that goes in front of this ... You could actually create the feeling of the museum here ... like you know sometimes in a museum you get ... a rounded structure like that (points on picture) ... Like an auditorium ... And this thing is like hanging in that auditorium ... And this is the real world (points on picture) [*specific procedures and elaboration of idea*]

WFL: Then what's the auditorium doing hanging around in the background?

T: This is where this came from – it's not part of the past [*elaboration of idea*]

WFL: ... can I put ... the auditorium off to one side ... Put it there so it sort of curves around like that

T: Have you done history of art – d'you know the Guggenheim Museum? [*verbal reference to known visual example*]

WFL: Yes

T: That type of feeling. Something very spatial ... And it's like all the sounds cry with that ... so you want to get something very spacey, but rounded there (points on picture). And then this becomes the real world ... So this becomes light [*specific principle*] ...

WFL: So what must I do here then (points on picture)?

T: You're going to create real live ones [whales] in the water ... It doesn't have to be too big, this thing here. And you could make this smaller, this (pointing on picture). And I think he's got to be bigger (pointing on drawing) ... with some pencil and some texture [*specific procedures with visual reference of the type required*] ...

In summative criticisms all interactions included one or more clear judgements as occurs in the following extract.

T: This is quite interesting (pointing on work) [*unqualified approval*] ... I still think that this face tonally, can be worked in slightly. With yellowy colours and maybe little flecks of colour ... possibly with pencil crayon [*general principle and specific procedures*]. This becomes a bit white ... it tends to isolate – it would have more form if some of the green blended into that – if some other colour came through there (pointing on work). So don't let it be isolated entirely

from its background. Here also, that becomes a little bit isolated, bring little bits of tone up here (pointing on work). So it becomes part of that whole. The same with this here, it tends to jump out – maybe bring a bit of the brown tone or something into there (pointing on work) [*specific principle and procedures with showing in the required form*]. And then this becomes very crucial and important (pointing to area on work). Think about it ... if you want it to be a white outlined shape, or if you want it to move through ... It's almost as if you're looking up at that and it should be special, it should almost be like a moving shift of colour ... or a variety ... shift of tones ... even picking up ... some of the bits of colour from the environment ... so it moves through. That little edge becomes quite important [*specific principle and procedures with showing in the required form*]. That brown there can be slightly darker than this brown here, okay (pointing on drawing), so to tone in that you don't get such a regimented thing – breaks – it can be strong but at the same time you can put a bit of darker tone in there [*specific principle and procedure with showing in the required form*]. The face can be slightly – or the whites of the hair or the blacks of the hair can be reflected in there – some of the water can be like darker here, and then lighter (pointing on picture), so its more of a feeling of ... going up into the neck and this face ... It can work if you look at the neck shape ... the shoulder shape ... or even reflect the face shape ... back to yourself ... it's a plain area ... just think of ... interesting shapes that can be created in the water ... [*specific principles and procedures with showing in the required form*]

In the summative criticism session of a younger (grade ten) class used to supplement grade twelve extracts, the teacher elaborated criteria at the start, as 'the way you handle the medium' [*general principle*] and 'a feeling that you evoke ... what's in a dirt-bin ... darkness and dirtiness and stains and oiliness and everyone's debris ...' [*idea elaborated*]. Over three quarters of interactions following this included one or more clear judgements: an example is given below.

T: I find this fairly well technically handled [*semi-qualified approval*] ... this (pointing on picture) doesn't quite have the dirtiness that this has (points top other drawing), this has more evocative, interesting images [*qualified approval*], but that's a bit empty [*specific principle*]. There are areas here (pointing to areas in first drawing) that work extremely well [*unqualified approval*], and very nice areas of shading [*qualified approval*]. That compositionally works well (pointing into second drawing) [*qualified approval*].

In summary, criteria were clear in the introduction and almost all clear in the summative criticism sessions. Over three quarters of individual teacher-learner interactions in the planning/doing phase contained one or more clear judgements.

Framing: F + +

Pedagogic feature 11: **Instructional content** (Data sources: teacher interviews)

The following recounted projects were done in the last two years of secondary school, and are presented below with their complexity gradings.

Recounted project	Complexity grading
1	3
2	3
3	3
4	3
5	3
6	3
7	3
8	3
9	3

All recounted projects were complex. Content score '+ +'

PEDAGOGY 1A

SELECTED TRANSCRIPTS

23 minutes of introduction to/discussion of the observed project in one lesson
91 minutes of the planning/doing phase of the observed project over three lessons
12 minutes of individual summative criticism near end of project over four lessons

POWER RELATIONS

CLASSIFICATION OF DISCOURSES: CONSECRATED/UNCONSECRATED

Pedagogic feature 1a. **Two- and three-dimensional art displays on walls and open areas in the art classroom and school** (Data source: observation notes)

Successful works by previous high-achieving learners were hung periodically in one of three interlinked art classrooms. The teacher was observed referring to these in practical lessons, and learners were frequently seen looking at them. There were two mounted framed original works by the teacher, an artist, and a couple of art posters from local consecrated galleries in a second room. There were reproductions of Impressionist works and water-colours not in any consecrated style, but these were outside the art room, in the school's airy light-filled passages.

Classification: C + +

Pedagogic feature 1b. **Visual materials stored but available for use by learners, in the art room and school library** (Data sources: observation notes; interviews with teachers/librarians)

There were no art books in the art classrooms and 42 in the school library. Learners did not generally make use of the latter. They comprised a few general art history textbooks and several technical 'how to' books for calligraphy, photography, ceramics, cartooning, paper-flower making, handicrafts, paper mache, and creative lithography. There was no set budget for books but the teacher could make and claim back purchases under R300.

Classification: C - -

Pedagogic feature 1c.**Direct reference to consecrated visual materials by the teacher, verbally and/or visually, when introducing/facilitating the carrying out of a project** (Data sources: teacher interviews and transcribed texts of selected lessons in the observed project)

In the teacher's recount of projects, he mentioned consecrated materials in four (33%) of twelve instances. In one he showed learners work by Jasper Johns, and in a second an 'art house' film. He also took them to an exhibition of images of Table Mountain at a local consecrated gallery.

In the planning stage of the observed project learners were required to sketch from a variety of local public sculptures. This was preceded by a whole-class discussion of known monuments, an extract of which follows.

T: It's [the project's] dealing with a monument or memorial – and that's the theme of the project. Any monument or memorial in the Cape Peninsula area ... A monument is anything ... [that] commemorates a person, action, or event ... It could include things like national monuments – what are national monuments?
CFL: The Castle
T: Why the castle?
CFL: 'Cause it's old
CFL2: 'Cause everything's in there
CML: It's old
CML2: This [the school] building

T: This building ja, it's a national monument – why?
CFL: 'Cause it's old
T: 'Cause it's old ...
CFL3: The Taal monument
T: The Taal monument ... now that's dedicated to language – what language?
CML2: Afrikaans
T: Okay ... Things like this building or certain styles of architecture ... Just say for example you see a house, and it's got this little badge on it, and you look downstairs at the school ... which symbolises a national monument ... It could be an Edwardian, or Georgian, or Victorian house for example, or building ... That means that it falls within that style of architecture – it's a good example – and therefore can be preserved as such ... but why those names? Where do those names come from?
CML3: The Queen ...
T: .... [In] Cape Town, there's ... Cape Dutch architecture ... now where does that come from?
CML4: From Holland
T: From Holland, okay, and it's been changed to suit here ... And in Mossel Bay there's a tree, a post-office tree, a tree with a post-office stone that people used to leave mail under. That has become a national monument as well. So it could be one of a number of things ... Let's just go through [the notes]. Determine intention, and references of the structure of your choice. In other words, what is the purpose, and what does that structure refer to? .... What is it symbolic/what is it representative of? ... What does it mean? Okay, what is it trying to say ... Is it dedication, is it commemoration, does it commemorate something from the past? Or the present? Or something in the future, possibly? ... So you have to try'n understand what they're about ... That sculpture ... as you're coming to the Avenue, on the left, outside the cultural history museum – it's of Smuts. Now a particular artist did that sculpture. Okay so you can see his kind of style, and his vision, and his working techniques, and his style of working and so on, and how he's expressing those things through the vehicle of sculpture. And using a particular individual ... that's Jan Smuts ... So you're looking at Smuts, and you're seeing something of Smuts' character, in that bronze, as well as something of the artist, and the way he works. So it can be fairly complicated ... Just in terms of formally ... Your approach may be joking, tongue-in-cheek, it could be serious, it could be traditionalist ... Think – the year before last, d'you remember they [consecrated artists] played around with some of the monuments here in the Gardens ... For example the one outside Parliament ... that equestrian sculpture became a Basotho person with his ... straw hat and blanket. Rhodes became something else ... they played around with them. And they actually altered the existing sculpture.
WML: Oh is that the one down in ... It had Bart Simpson heads all stuck in it [competition-winning sculpture 'Bart Simpson' by local consecrated artist Brett Murray]
T: That's right ... So you look at these different monuments and memorials – you have to look at them and try'n understand them ... And you might work formally with it ... You're gonna look at size ... [and] character. Tone ... upon that surface, how's light gonna change, reflect, how's shadow gonna be thrown across the surface during the course of the day, evening, and so on. Texture – from stone, through metal ... wood, bronze, plastic, glass – it's all gonna be different ... You could have your pedestal there, and you could put your soap sculpture on it and let it metamorphose through the seasons ... So it's up to you people, how you actually wanna approach the ... shape, form, and very important, the interrelation between the monument and its environment. Because what you people have to do ... you can take anything around the Peninsula – it can be a Diaz Cross for example, Portuguese construction ... and you may place it here for some reason, next to the Portuguese Fish and Chips shop ... You can play around with things that are humorous and funny – just think of Opal's monument to motor cars and magazines, and all the rest. So you have to choose a site for your monument or memorial in the Gardens here, and it can either harmonise, blend in, or stand out, contrast, or whatever, to the surrounding environment. What you need to do is some research. Look at Inkatha, look at the internet, go to the library, whatever, get some books out on monument and memorials ... Depending on where you're coming from, and how you researched it ... Then you're gonna be working with stuff here, in the immediate surroundings ... So you're gonna be doing a drawing, but you should try'n have some understanding of what you're drawing. If it's a person standing there, you should know who he is ... It's no use just saying 'it's gonna be Nelson Mandela because I remember he was in jail or something, and I'm not too sure but I'll do him'. Try'n develop some kind of insight, do some research into it, so you know what

> That sculpture ... as you're coming to the Avenue, on the left, outside the cultural history museum – it's of Smuts. Now a particular artist did that sculpture. Okay so you can see his kind of style, and his vision, and his working techniques, and his style of working and so on, and how he's expressing those things through the vehicle of sculpture. And using a particular individual ... that's Jan Smuts ... So you're looking at Smuts, and you're seeing something of Smuts' character, in that bronze, as well as something of the artist, and the way he works ...

By making a point of drawing attention to the different ways consecrated artists handled similar subject matter in an exhibition at a consecrated gallery, the teacher was effectively approving the use of a range of styles or 'languages'.

Classification: C -

CLASSIFICATION OF TEACHER-LEARNER SPACE

Pedagogic feature 3a.**Teacher-learner use of space in art making lessons** (Data source: observation notes)

The art classroom consisted of three interlinked rooms, each of which led onto a balcony. Learners grouped and re-grouped themselves within these spaces, including and often working at the teacher's desk. The teacher continually moved between groups of individuals, usually spending all lesson time amongst learners and only very occasionally sitting at his desk. When the teacher interacted with individuals others usually joined in spontaneously; interactions were seldom private. Small group interactions were relatively brief, usually lasting between a few seconds and five minutes.

Classification: C -

Pedagogic feature 3b.**Teacher-learner interaction time** (Data source: transcripts of selected lessons in observed projects)

There were 70 distinct teacher-learner interactions in 91 minutes of the planning/doing phases of observed projects, 25 (36%) of which were coded of 'medium' duration and 11 (16%) as 'long'. Overall, 52% of interactions were more-than-brief.

Classification: C -

CLASSIFICATION OF LEARNER-LEARNER SPACES

Pedagogic feature 4a. **Learner-learner use of space by learners in art making lessons** (Data source: observation notes)

There were three large tables, a printing press, and inking and plate preparation areas in one of three inter-connected art rooms. In a second room there was a light table and materials store, and in a third, a teacher's desk, storage racks and table. All three rooms led onto balconies with benches and tables. Apart from periods in which the art teacher addressed the class as a whole, learners grouped and regrouped themselves within these areas according to facilities they were using or others with whom they were interacting. Movement of individuals within and between groups and areas was free and on the basis of work or social interaction. The teacher was observed asking a group of learners to come in from a balcony only once, after they had been socializing for a lengthy period and were behind with their work.

Classification: C - -

Pedagogic feature 4b. **Utilisation of materials by learners in art making lessons** (Data source: observation notes)

Many but not all learners had their own basic drawing materials such as pencils, sharpeners and erasers. The teacher provided all other materials such as cutting tools, printing substrates, papers, inks and solvents, communally. In the observed project basic as well as communal materials were shared.

Classification: C - -

CLASSIFICATION OF AGENTS

Pedagogic feature 5a.**Degree of separation of learners** (Data sources: observation notes; transcripts of selected lessons in the observed project)

Some 42 (60%) of 70 teacher-learner interactions in 91 minutes of the planning/doing phases of the observed project involved the teacher and individual learners, while in 28 (40%) several participated. The latter almost always consisted of small spontaneously-formed groups of learners. In interactions with teachers and single individuals the silent observation of additional learners was noted. Examples of interactions with typical classification of learners follow.

1. INTERACTION WITH TEACHER AND INDIVIDUAL LEARNER

CFL: Can I sit and draw the well?
T: Mm?
CFL: Can I sit and draw the well? Relating to something. Like how about – we're all drowning in it?
T: We're all drowning in the well ... I don't understand what you wanna do with the well
CFL: I dunno, I just like the idea of the well
T: Well you could start with the well – and your monument or memorial could be part of it, so it could be like having something you could actually wish about. So it could be something dedicated to the future
CFL: Mm. Ooh, the future ... Can it be something taken from another country?
T: Taking it that you've extensively travelled through and – (smiling)

2. INTERACTION WITH TEACHER AND SMALL GROUP OF LEARNERS

CFL: Sir can I draw this monument? (Points to a public memorial figure inscribed with 'My hinterland lies here', in a pose reminiscent of a Hitler-salute)
T: Ja
CFL: I'm gonna leave (situate) it here, but I'm gonna change him (the sculpted figure) – make him Hitler. But then I need a destructive background, like thorn trees ... Sir, what can I make him stand for?
T: Think about it – what does Hitler stand for? Socialism? Fascism? You must go and do some research ...
CFL2: Definitely political ...
CFL: What are you saying?
T: You must do some research into it
CFL3: He made the roads
CFL2: Rhodes made the roads
T: That's the English point of view. Look around, don't just use the first sculpture you could find – don't make that your first choice
CFL: Hinterland, Hitlerland
T: Now that's the first thing – yes – play around with it

Classification: C -

CONTROL RELATIONS

REGULATIVE DISCOURSE: HIERARCHICAL RULES

Pedagogic feature 6a.**Learners' entry to/exit from the classroom** (Data sources: observation notes; transcripts of selected lessons from the observed project)

In the observed lessons, learners entered and exited the classroom individually as they arrived for and left designated periods, interacting freely and loudly with each other as they did so. At the start of the lesson they selected working spaces and began working or socializing. This pattern continued in the presence and absence of whole-class greetings by the teacher, with most learners spending portions of each lesson socializing but not working, working without socializing, or both. When the bell went at the end of the lesson, learners usually left individually as they were ready, sometimes greeting the teacher on their way out. Some left immediately while others took several minutes to finish working and tidy up.

Transcripts of two lesson beginnings and endings, followed by characterization of regulative comments within these, are given below. In the transcripts, characterization of regulative comments is given in italics in square brackets after the comments.

LESSON 2 (planning phase): START OF LESSON
[Learners entered as they arrived and settled in groups, chatting, all over the classroom, sitting on chairs and tables. Sound the levels were low to moderate. The teacher began to interact with individuals immediately]

T: Hello Tannie
BFL: I've been in a good mood the whole day
T: I've been in a bad mood the whole day
CFL: Are we going outside today?
T: Yep.
CFL2: Why've we got these papers if we're not gonna draw today? (said loudly, referring to sheets of drawing paper neatly stacked on the table)
CFL3: Sharrap man, we're going outside! (said loudly)
CFL4: We're not gonna draw today, we're only looking for a site today. See my pencils is sharp sir! (said loudly)
CFL2: Then why do we need pages? (loudly)
T: Don't you want pages?
CFL2: We're not gonna draw! (loudly)
T: You're gonna be walking around
CML: Howzit sir!
T: Howzit man
CML: (indistinct) ... How's your daughter?
T: (indistinct) Everything's being recorded and I'm not talking to you any more. Because of you I am buying a 1600mhz computer ... because you never gave me the discs ... (banter)
CML: (indistinct)
T: Okay come, let's go [outside to draw]. Okay listen everybody (normal tone) [*gently said command*]. Listen please (slightly louder) [*request*]. Hey! We don't have time! [*explanation for request*] What we're gonna do (loudly) -
CFL5: Be quiet please! (very loudly, and the class listens)
T: You people could be working on A4 paper ... (instruction starts just under two minutes after lesson beginning)

LESSON 2 (planning phase): END OF LESSON
[Learners spent the lesson drawing in public gardens near the school. Towards the end of the lesson they walked back to the school of their own accord, the teacher amongst them, and were in the classroom by the time the bell went. The teacher chatted to individuals as they arrived back in the classroom]

T: So what have you decided to do?
CFL: Stuff
CFL2: What're you doing?
CFL: I haven't decided yet

CFL3: The virgin woman
T: Who were you walking around with?
CFL4: Mary and Melinda and (indistinct)
T: Right. But you've done this project before
CFL4: No I haven't
T: Didn't you do it in grade 10, when you were still young?
CFL4: (shakes head)
CFL: (a bell rings) Is that the bell for us to go?
T: Ja (learners are returning to the classroom and leaving again individually. Some greet the teacher of their own accord)
CFL: Bye sir
T: Bye – what're you doing for sports this year? Are you doing debating?
CFL: There's no time for anything, I'm in matric this year
T: (indistinct)
CML: (indistinct)
T: I don't know Gary
T: Linda did you make any friends?
BFL: No sir
(classroom is empty)

LESSON 21 (doing phase of project): START OF LESSON
[Learners entered individually and most started to work just after they had arrived. No greetings were observed. The teacher immediately approached one learner and another approached the teacher]
T: Here (gives learner computer-scanned, widened image) I'm sorry about the funny coloured ink
CFL: No, it looks fine
T: Are you happy with it?
CFL: Ja
CFL2: Sir may I have a piece of (points to sheet of polypropylene) ...

LESSON 21 (doing phase of project): END OF LESSON
[The bell went and learners left as they were ready, some immediately and some up to three minutes later. The bell went in the middle of an individual teacher-learner interaction]
T: ... You need to have a balance of the greys, the middle tones, even if you draw on the white (bell goes)
WML: Okay
T: Next time you print, just try it – you just need to have a balance like this (points to top of picture). White, middle tones, dark tones
WML: Ja I'll do that
SEVL: (indistinct, several talk at once)
T: Okay it looks like I'll decide what we'll be doing (for a class outing)
CML: (indistinct)
T: No no no no!
SEVL: (indistinct) it must be somewhere exciting
CFL: Can't you give us until tomorrow sir
T: I actually thought we could catch a train from Town to Muizenberg ...
CML: (indistinct)
T: There's mountain, sea – I'll set up a whole lot of different topics and you do whatever you want
BFL: Sir (comes up to teacher as other learners are busy leaving) tell me now this does look good – to me it does look good (indistinct, high sound levels in classroom) (learner has copied a photograph and not manipulated it as the teacher suggested)
T: Anything for you looks good, Linda
BFL: Why sir?
T: It's very easy, just get a picture, cut it up, skew it and –
BFL: Yes I will do it
T: You just stick it down there
BFL: And then I will -
T: Just choose a relevant picture. It can be anything – it can even be like – whatever you want
BFL: And I must still draw the background from behind the bars?
T: You're gonna take a picture

BFL: Ja
T: A photograph, olraait. And you're gonna cut it up and put it between the bars. So it's not gonna be the same photograph – you can skew it like you did in the portrait, okay?
BFL: (leaves classroom and then comes back in) Sir I must take this picture and cut it up – and put it in the background
T: Yes Linda
BFL: I just want to make sure otherwise you're going to blame me (learner is angry) (All learners have left)

Two comments were characterised as regulative in the above extracts. Of these, one was said to suggest horizontal and the other hierarchical social relations. The hierarchical command was made in a gentle tone. Entries to and exits from the classroom were informal.

Framing: F - -

Pedagogic feature 6b. **Control of communication** (Data sources: observation notes; transcripts of selected lessons from the observed project)

In 91 minutes of the planning/doing phases of the observed project, 70 distinct teacher-learner interactions were identified. Some 38 (545%) of these were characterized as open, although learners said more than the minimum ('mmm', 'I will sir', 'okay', 'I'll do that now') in 42 (60%) of interactions and made 'elaborated' (over ten-word) interjections in 20 (29%). Examples of typical interactions follow.

The teacher was observed spending almost all lesson time amongst learners, opening dialogues both directly and indirectly associated with, or unrelated, to work. Some examples follow.

L: Sir I wanna do how – I mean, show how they used to treat the people
T: Ja – d'you mean if you use the slave bell ... There's a slave bell there
L: What?
T: A slave bell. They used to ring that bell ... to call people to work. So you can maybe use something like that. You could use different kinds of people

L: Sir
T: Ye-es
L: I found something (an image to work from)
T: Good, don't show anybody ... (banter)
L: It's that lady on top of the fountain
L2: Which lady?
L: The catholic lady, I think she's catholic, I don't know
L2: How d'you know she's catholic?
L: She's not Moslem, she's not Hindu
L2: She's standing on top of the fountain ...
L: So I was thinking of that with a very destructive and grotesque background
T: The background being here in the garden
L: The garden, hey
T: (Laughs)
L2: I don't know where you get destructive and grotesque in the garden
T: No no no – you can do her in front of the school, and you could let the school degenerate into this graffiti-spoilt, gang-ridden –
L2: Sir, you've just given her the perfect idea ...

L: Why're these people sitting here in the garden (public space outside the school)? They're having an affair – it's lunchtime, why d'you wanna sit in the garden?
T: She's very sharp (laughs). But the sad thing is, she's gonna end up in the garden ...
L: I'll be sleeping over here –
T: No no, you'll be sitting here with a bottle. Of water ...
L: (Indistinct)

L: Can I sit and draw the well?
T: Mm?
L: Can I sit and draw the well? Relating to something. Like how about – we're all drowning in it?
T: We're all drowning in the well ... I don't understand what you wanna do with the well
L: I dunno, I just like the idea of the well
T: Well you could start with the well – and your monument or memorial could be part of it, so it could be like having something you could actually wish about. So it could be something dedicated to the future
L: Mm. Ooh, the future... Can it be something taken from another country?
T: Taking it that you've extensively travelled through and – (smiling)

T: Who's carved on the table here – is it you (said conspiratorially)?
L: No, it wasn't me
L2: I saw it here yesterday morning
T: You mustn't say that because when those grade 10's come, I'm gonna get them, I'm gonna put them on detention (said softly in mock menacing tones)
L2: Ja, put them on detention

T: (Smiling, to a group of boys at a public fountain, looking for images to draw) No fishing boys
L: Fishing – why not?
L2: Can I do this and dedicate it to the fishing industry?
L3: Why d'you wanna do that, it's not a monument –
T: Um
L2: Culture, you convert it
T: No, but you could do a monument there – do you understand? (laughter) You could use the base and the water and all the rest, and you could change what –
L3: Dedicate it to a fishing boat or fishing –
T: To the Portuguese fishing industry
L: (Indistinct)
L2: He's talking about –
T: I'm talking about why do an 'I & J' thing when you could do like... (local fishing industry), all the illegal over-fishing
L: Did they get off?
T: No ... we're just talking rubbish
L: Okay

Some examples of closed interactions follow.

T: Let's see what you're doing – what're you doing there Chicken? (said to a learner not working) You're doing nothing as usual
CML: (indistinct)
T: Chicken – please come on. Come on

CFL: (butting into another teacher-learner interaction) Now must I carve out this line, and leave this black? (points on printing substrate)
T: No – do it the other way. Do it the other way

T: Okay the bell's going hey, you must clean up
L: Sir (waves hands full of black ink so the teacher can see)
T: (Smiling) Would you like some beauty soap to wash yourself?
L: (Laughs)

BFL: I wanna make these bars black
T: Oh here's Miss Bars (smiling) (the teacher had previously told this learner that the idea of using bars was unsufficiently original, and discussed other options with her). This is such a –
CFL: It's her idea and if it's not original then there's nothing else she can do
T: I know, but when I mark, I have to mark in the same kind of way. I think this is such a clichéd boring option
CFL: You must think of the person that's doing it

T: Okay so now she's like a really dof, moronic person, with no work, that's super lazy (said with a smile, gently)
BFL: D'you know how long I've been thinking of this – since yesterday!
T: Since yesterday! (said in mock surprise)
CFL: (laughs)
BFL: It's not funny sir
T: So did you watch Pop Idols on TV?
BFL: No
T: What did you watch on TV last night?
CFL: It wasn't on sir, it's coming on tonight
T: Oh – right. Do something interesting with these bars – imagine –
BFL: Mmm
T: Okay, imagine you have a picture and you can like cut up that picture and you can like skew it so it doesn't fit together. So you could actually have it (gestures, suggesting that the picture would fit between the bars) – quite interesting, you know
BFL: (nods)
T: You'll see it in these spaces here
BFL: Yes sir
T: You can't just hand in something that a primary school child would hand in – and say this is what I think'. Or a preschool child
CFL: This (points to learner's sketch) is not pre-primary sir, they can't even draw!
T: Carry on standing up for Linda –
CFL: I have no more to say sir

Framing: F -

Pedagogic feature 6c. **Regulative mode** (Data sources: observation notes; transcripts of selected lessons from the observed project)

The most frequently occurring regulative mode in interactions included implicit norms with inter-personal/art-positional comments, followed by those with art norms and inter-personal/art-positional communications. There were some interactions in which social norms were explicated and some in which social-positional or imperative comments used.

The following table shows percentages of interactions with particular regulative modes.

	Learner transgression + inter-personal/art-positional teacher comment	Learner transgression + social-positional/imperative, or mixed-mode teacher comment
Norms implicit/art norms, with or without implicit norms	54%	19%
Social norms or mixtures of art and social norms, with or without implicit norms	12%	14%

Examples of interactions with typical regulative communications follow.

1 .INTERACTION WITH IMPLICIT NORMS AND INTER-PERSONAL/ART-POSITIONAL COMMENT

T: (To a learner printing an image) How's that come out James? (To a learner not working) Why don't you ask James to print for you?
CFL: And then – what'll you give him?
T: Well you could give him money and he could print for you, and you're sitting around talking and laughing (bantering tone)[*norm implicit; inter- personal comment*]

2. INTERACTION WITH ART NORMS AND INTER-PERSONAL/ART-POSITIONAL COMMENT

CFL: So how's this [image of sculpture on a post-card] gonna go with this (showing work as she speaks)?
T: Well, it does. That's a Chinese lantern [referring to flat image learner has drawn]. Okay, so if you include that [referring to image of sculpture on post-card], you're including like an element – can you see – it's running into space – you can put that in front of that
CFL: Sir that's difficult. I need carbon paper
T: You don't need carbon paper, you need to finalise your design and what you're doing. You need to include that [sculpture image] into that [drawing] [*art norm; art positional comment*]
CFL: I don't know how to
T: Put it [the drawing] on the light box, put this [post-card] down on it, and shift it around a bit and see what happens [*art-positional comment*]

Framing: F –

Pedagogic feature 6d.**Initiation of teacher-learner dialogue** (Data source: transcripts of selected lessons from the observed project)

In 91 minutes of the planning/doing phase of the observed project, there were 70 distinct teacher-learner interactions, 32 (46%) initiated by the teacher.

Framing: F –

Pedagogic feature 6e. **Control of learners' focus on work and social interaction unrelated to work, during practical lessons** (Data sources: observation notes; transcripts of selected lessons from the observed project)

In 91 minutes of the planning/doing phase of the observed project most learners had periods of being focused on work and others where they interacted without working. A range of degrees of commitment were observed, from mostly work-focused to mostly socializing. The teacher allowed learners to work and interact socially, directing their attention towards work when they had been consistently interacting at the expense of work. Learners were sometimes observed continuing to interact without working after episodes such as those following, and sometimes observed focusing on work.

T: Okay if I was you I'd leave now, I'd catch the bus (said to a learner not working)
BFL: (indistinct) Sir what must I do at the back here (in the background)
T: What is that …
BFL: I haven't actually thought about it
T: You haven't thought about it (learner laughs). Thinking is actually quite dangerous, okay, and –
BFL: But now say my background –
T: He could be … (teacher and learner discuss a few options) … No but you see, it's up to *you*. You could do ten thousand things, it's for *you* to say what must you do … It's what *you're* thinking about, the way *you* relate to this particular … So when you say you're thinking about it and you don't actually take those thoughts and put them down on paper … What about that, what about this. Then you're actually thinking, and you're walking down the passage and you're thinking … And you wake up in the middle of the night … If you were to sit down and write that, that is actually what would happen – it will be on your mind. And you don't know *when* the right thing will come to mind … In terms of … What you've done here … You can't even begin – you're not even beginning to actually confront it and say 'What am I doing? What am I trying to say?'

T: Chad – don't mess around (very softly)
CML: (laughing)

T: Let's see what you're doing (to two interacting learners). What're you doing there, Raoul? (looks at learner's work) You're doing nothing as usual (gently)
WML: (indistinct)
T: Raoul – please – come on. Come on (gently)

T: Where's the rest of your stuff – that you've done so far?
CFL: It's in my bag
T: Well take it 'out your bag'! (gently, smiling)

Framing: F -

Pedagogic feature 6f. **Balance of sound levels** (Data sources: observation notes)

In 91 minutes of the planning/doing phase of the observed project sound levels were 'very quiet to low' 5% of the time and 'low to moderate' tending more towards moderate than low, for the rest (95%) of the period.

The relatively high sound levels made the teacher's comments inaudible to all but those immediately involved. This appeared to have the effect of rendering individual or small-group teacher-learner interactions private. The teacher spent most of the lesson moving amongst individuals or small groups, only occasionally addressing the whole class.

Framing: - -

INSTRUCTIONAL DISCOURSE

Pedagogic feature 7a. **Macro-level framing of selection: selection of projects** (Data source: teacher interviews)

In the interview, the teacher described in detail, projects done by learners in the study over their final two years of secondary school. He mentioned projects from the third last year, briefly. All projects recounted by teacher are presented below. Handouts were sometimes given: two are included below.

Grade 10 projects
The grade 10's did technical projects. Sometimes they did a project like 'monuments and memorials' or 'a figure in water' at a lower level than the grade eleven's. They would all go down to a single monument and work from that, or go to Long Street Baths and do one thing like a building or whatever – not a whole project like the grade eleven's, which was too complicated.

Grade 11 projects
1. (a) The project: using magazines, they had to choose a photograph of a face, enlarge it, cut it up and re-assemble it, and then draw it
   (b) What was said/shown in the introduction: we spoke about the procedure, using the light box or window, playing around with shapes
   (c) What learners could select: face; composition
   (d) Evaluation criteria: on the formal level

2. (a) The project: still life
   (b) What was said/shown in the introduction: I set up the still life and told them to draw it
   (c) What learners could select: the view of the still life
   (d) Evaluation criteria: on the formal level

3. (a) The project: monuments and memorials
   (b) What was said/shown in the introduction: I went through the handout. We discussed what public monuments were about; specific monuments known to them; the purposes, functions, and sources of reference in these monuments; what they represent and mean; how the artists used their style, vision and technique to express these things; what the sculptures tell us in terms of their social, political and historical significance. They each had to design their own

monument to a person or event in the past or present, choose their approach – humorous, tongue-in-cheek, traditionalist or whatever. We spoke about altering existing structures, as was done in Brett Murray's 'Bart Simpson' work; about shape, form, and the relation between the monument and its environment; about taking parts of existing monuments and placing them in different sites; harmonizing and contrasting monuments and sites; researching their monuments

(c) What learners could select: everything - subject matter, message, approach, style, medium
(d) Evaluation criteria: if they managed to engage with a monument and come up with something interesting

4. (a) The project: the eye, interior – exterior: an object – subject composition
(b) What was said/shown in the introduction: I can't remember
(c) What learners could select: everything
(d) Evaluation criteria: if they managed to come up with something interesting

5. (a) The project: numbers project
(b) What was said/shown in the introduction: I showed them slides of Jasper John's '0 – 9' series – stencilled numbers laid down and then painted. And his 'Bulls' Eye' – a target is what you see but he says the opposite, he wants you to look at the whole surface. Incorporating things like the hand as symbols of yourselves. They had to do something similar: overlap numbers so that they appeared and disappeared, shape positive and negative spaces. Colour lino.
(c) What learners could select: composition
(d) Evaluation criteria: interesting image; overlapping shapes; use of colour

6. (a) The project: Seven deadly sins: they had to create seven images
(b) What was said/shown in the introduction: I gave a handout with a list of the seven deadly sins. They had to go out and look these up, clarify them, and find visual equivalents. I showed the movie 'Seven deadly sins' – there's a murder following a scene about gluttony – we discussed how images had been created for each of these: they were not neutral. For example, gluttony was more than one extra pastry and the image should show this. They had to collage or draw seven designs or compositions that worked separately and together. They couldn't jump around with scale and medium. They had to use a framing device, some kind of feature like a room or scene. These things never emerged – it was over their heads.
(c) What learners could select: everything, within the range of supplies
(d) Evaluation criteria: It turned out to be four deadly sins. I set something specific but I didn't want to see what sin it was, I looked at it from a different perspective. I tried to get them into printing, expressing one idea across prints. I looked at strengths they manifested.

Grade 12 projects

7. (a) The project: Old and new Cape Town – for example 'the parade' then and now; 'the waterfront' then and now
(b) What was said / shown in the introduction: I told them to find areas in Cape Town that they liked, and find historical references for the places 100 years ago. They had to do research on the areas, collect old and new images, and then mesh them together
(c) What learners could select: open, within the range of supplies
(d) Evaluation criteria: I don't have specific criteria. I look at the basic technique and imagery, and at what they've done. I use marks as tools to encourage or discourage – they don't care about marks, all they care about is 'did I get 40% (pass)?'

8. (a) The project: Table Mountain
(b) What was said/shown in the introduction: We went to an exhibition of images of Table Mountain. We didn't do a tour – I showed individuals pieces I thought would appeal to them – we went to the exhibition three times. We looked at how different people had handled their approach to Table Mountain. They [the learners] had to do Table Mountain
(c) What learners could select: open, within the range of supplies
(d) Evaluation criteria: basic technique and imagery

9. (a) The project: Drawing in the Gardens: learners had to do one drawing in the gardens and then use this as a template for a scratch-lino plate

(b) What was said/shown in the introduction: They had to choose a small area, make a viewfinder and select an area using this. They could incorporate bits from all over the Gardens. They had to create a composition, establishing a fore-, middle, and background, with black, white, and grey tones. They had to create the illusion of tone with texture. I pointed out (tonal and textural) qualities on the leaves while they were drawing.
(c) What learners could select: composition (lino, black-and-white, A3 scale stipulated)
(d) Evaluation criteria: general impression

10. (a) The project: Aquarium
(b) What was said/shown in the introduction: We discussed how they could approach layering on paper; the decorative qualities of fish; creating depth/fore-, middle, and background. I showed them pictures, photostats of fish under water. We spoke about movement. I steer clear of showing them 'what things should look like' as this limits them.
(c) What learners could select: everything within the range of supplies
(d) Evaluation criteria: general impression

11. (a) The project: Long Street. We walked and drew the whole day. I photocopied the drawings and they used the photocopies to transfer the image for printing. They walked up and down, looked at what happens in Long Street, then went back and drew.
(b) What was said/shown in the introduction: We discussed the history of the area. I gave them lots of notes. It's an interesting place, there're colonial and post-modern buildings. We looked at activities that took place in the past and present.
(c) What learners could select: everything – subject matter, medium, full colour or black and white, scale.
(d) Evaluation criteria: the overall feeling; in terms of the individual, what they've produced in terms of where they are – if they got to a certain point.

12. (a) The project: Kirstenbosch
(b) What was said/shown in the introduction: We went through the handout. First they had to make a series of accurate drawings of succulents, taking positive and negative shape into account. Then they had to develop these drawings in some way. They could use them as a basis for formal experimentation; incorporate them into a landscape or still life; use them symbolically to create a social comment or mood. In the third stage of the project they had to produce a series of compositional drawings based on the earlier drawings, and convert these images into intaglio or relief prints.
(c) What learners could select: everything – subject matter, media, scale
(d) Evaluation criteria: they had to have more than one piece of work, go out and draw, and go a little further

Table 36: Summary of project details for Teacher 1A

School grade	Project name and focus	Selection of project	Selection within project	Reference materials provided by the teacher
10	Technical projects	Teacher	Formal elements; composition	(not known)
10	Single-subject projects	Teacher	Approach to subject; composition; formal elements	(not known)
11	1.Face from magazine	Teacher	Face; composition	None
11	2.Still life	Teacher	Composition; formal elements	Still life set up in classroom
11	3.Monuments and memorials	Teacher	Open [imagery; idea; medium; scale; formal elements]	Discussion of known public sculptures/ monuments
11	4.Interior/exterior	Teacher	Open [imagery; idea; medium; scale; formal elements]	None
11	5.Numbers project	Teacher	Composition	Shown work by Jasper Johns
11	6.Seven Deadly Sins	Teacher	Open [imagery; idea; medium; scale; formal elements]	'Art house' movie
12	7.Old and new Cape Town	Teacher	Open [imagery; idea; medium; scale; formal elements]	None
12	8.Table Mountain	Teacher	Open [imagery; idea; medium; scale; formal elements]	Exhibition of images of Table Mountain at consecrated gallery
12	9.Drawing in the Gardens	Teacher	Imagery; composition	None
12	10.Aquarium	Teacher	Open [imagery; idea; medium; scale; formal elements]	Photostats of fish under water
12	11.Long Street	Teacher	Open [imagery; idea; medium; scale; formal elements]	Time spent in Long Street
12	12.Kirstenbosch	Teacher	Open [imagery; idea; medium; scale; formal elements]	Time spent at Kirstenbosch

From the above outlines and Table 36, it can be seen that the teacher selected all projects. At the end of the final project, learners could choose to base their last series of prints on the topic covered in the final or penultimate projects. In learners' final exhibitions about eight of twelve recounted projects could be identified across several exhibitions.

Framing: F + +

Pedagogic feature 7b. **Micro-level selection of aspects within projects** (Data source: teacher interviews)

From the above project outlines and Table 36 it can be seen that learner selection was narrow, confined to choice within technical elements, in two of twelve projects. In the remainder of instances, learners could make technical and subject-matter selections within teacher-set guidelines.

Framing: F - -

Pedagogic feature 7c. **Micro-level selection of sources of reference when planning/creating an artwork** (Data source: teacher interviews)

In project descriptions and Table 36 above, it can be seen that the teacher provided sources of reference in eight of twelve instances in which information was known about project introductions done over the two final years of secondary school

Framing: F +

Pedagogic feature 8a. **Macro-level framing of sequencing: sequencing across projects** (Data source: teacher interviews)

From project descriptions outlined above and in Table 36, it can be seen that there was a general increase in the level of complexity of projects over the three final years of secondary school. All early projects in the third last year of secondary school required the relation of fewer simpler features than those in the two final years. Most projects during the latter were very open, requiring learners to select and relate a wide variety of features. Every now and then, as can be seen with projects five and nine above, a simpler exercise was interspersed with these.

Framing: F +

Pedagogic feature 8b.**Micro-level framing of sequencing: sequencing of components within projects** (Data sources: observation notes and transcriptions of selected lessons in the observed project)

Observed project phases were distinguishable if implicit as in the following introduction.

T: ... what you people have to do ... you can take anything around the peninsula ... [and] you have to choose a site for your monument or memorial in the garden here ... What you need to do is some research. Look at Inkatha, look at the internet, ... get some books ... Then you're gonna be working with some stuff here in the immediate surroundings. It'll be really nice if you people can go ... to look for specific things. So you're gonna be doing a drawing, but you should try'n have some understanding of what you're drawing ... And you can make a series of prints or one print ...

Learners were required to research, sketch for, design, and carve and print, and rework one or several images. The teacher 'enforced' sequencing of these stages barring those of 'research' and reworking, through pacing. A small number of learners brought reference photographs and information to the lesson following the introduction; the remainder did no research into the broader contexts of imagery they selected. The lesser importance of the presence of research in the sequence was revealed when a learner enquired about it half way through the project:

CML: Sir must we do some information on this thing as well?
T: No. Collecting information was to enable you, actually – to do that (points to image)

The sketching or planning stage was 'enforced' by the whole class being required to visit and draw in a site with potential imagery, public monument/memorial-filled gardens, together. Learners were taken to the site for eleven consecutive 40-minute lessons, with the initial instructions below.

T: Okay come, let's go ... What we're gonna do ... You people could be working on A4 paper – I can give you paper today. I'll give you two sheets of paper ... Or I can give you paper for next period. You're gonna be taking a walk around the gardens, looking at monuments and memorials, thinking about, first of all, the site where you're gonna be establishing your monument/memorial. And you're gonna be looking at things here, in the gardens, whether it's buildings, statues, or whatever ...

The teacher circulated amongst sketching learners, discussing and evaluating their selections.

Following this period of eleven lessons, a composition-creating stage was 'enforced' through individualised pacing: the teacher supplied substrates (linoleum or polypropylene) for print carving only once he had approved learners' designs. He began the design stage with the whole class as follows:

CFL: Sir are we going out today?
T: No because today's the day I said I was gonna look and see what you've been doing ...

He circulated with comments like 'let me see your work', 'what've you done', requiring learners to refine sketches. He discussed the conversion of designs into prints as learners presented these in this and subsequent lessons, with comments like 'are you gonna do a lino? Do it like that and we can transfer it ... I'll show you how to do it', or '... why don't you do a black-and-white lino ...?'. Provision of materials on approval is illustrated in episodes with three learners that follow.

CFL: Sir can I have my lino please, I'm finished. And sir, can I get a piece of paper?
T: Carbon paper?
CFL: Carbon paper (teacher supplies paper and lino)

CFL: Sir I need carbon paper
T: You don't need carbon paper, you need to finalise your design, and do what you're doing. You can't just copy that (post-card), you need to include that (post-card) into that (shows sketch)
CFL: I don't know how to
T: Put it (the sketch) on the light box, put this (photocopy of post-card) down on it, shift it around a bit, and see what happens ...

CFL: Lino?
T: Anything you want
CFL: I don't even know
T: You first have to have a design – a composition – before, you know ...

Individual carving-printing-re-carving-reprinting sequences were established by learners but the teacher's frequent engaging with semi-completed prints beginning with '... how did that come out ...?', ensured that most followed some sort of carving-printing cycle before final images were handed in.

In summary, the teacher encouraged learners to do 'research' at the start of the observed project and to rework unresolved prints, and enforced a set sequence for the remainder of the sketching/planning, design/composing, carving/printing and submission stages, through pacing and supply of materials.

Framing: F +

Pedagogic feature 9a. **Macro-level framing of pacing: pacing of quantity of work done** (Data sources: observation notes; transcripts of selected lessons from the observed project)

All learners had around nine mounted works between A5 and A3 in size displayed on wall space, and others stacked on the floor.

The teacher did not set up-front deadlines for projects, naming the finishing date once many learners had completed a first final print. In the observed project learners progressed at different paces, some submitting three final prints and others, one.

A learner approached the teacher half way through the project, asking about time boundaries, and the teacher was non-committal, giving an unrealistic answer.

CFL: How many weeks do we still have to complete this sir?
T: A week

CFL: No sir, that's impossible

Two thirds of the way through the project when learners had progressed at different rates, some carving prints and others still finalizing designs, the teacher announced the deadline to be a week away.

T: The people that are here (several were absent), this project will be marked next Friday
LSEV: Yuss.... (expressions of alarm)

The deadline was referred to in subsequent lessons as indicated below, although the project actually came to an end two weeks after the announcement.

T: And you, little girl, you have to have this finished by Friday (gently, to a learner not working)

T: Are you printing? Why're you printing – are you printing?
WML: (indistinct)
CML: Sir, it's gonna take me so long
T: It's gonna take you as long as it'll take you to do it
WML: But you want it by Friday?
T: Ja ...

When it became apparent that learners would not make the deadline at their then current pace, the teacher extended it by four days for most, five days for a few. He then enforced it in lessons running up to the final one, by reminding and monitoring learners as indicated in the examples below.

T: Listen, are you listening? (said to the whole class)
LSEV: Yes sir
T: Listen, this project's gonna be ending
CFL: Tomorrow
CFL2: This Friday
CML: Tomorrow
T: Okay, remember that hey. Remember that you carry all these marks. And rubbish that's handed in to me will be rubbish marks, and that rubbish mark will follow you around the first term, second term, third term, and into your year mark for the final mark ...

T: Linda – have you handed a print in? (to a learner not working)

T: (At the end of the fourth extended day) You've got until the end of this period – who still has to give me prints? (said to the whole class)
CFL: I've given you mine already
T: You've only given the one print – I want the other one. Have you given me a print, Javon?
CFL: Yes
CML: I'm gonna give you my print
T: Yes come on, come on, I am waiting
CML: I'm gonna give it to you on Friday
T: 20% off today – by the end of school – 40% tomorrow ... and it must be here before eight o'clock. (And, to another learner) Have you handed a print in to me?
CML2: Huh? Yes. Yes. Mine was –
T: No. (And to other learners) – you haven't given me yours yet, have you?
BFL/CFL: Almost, almost
T: Almost. Linda?
BFL: I must still print mine
T: By the end of this period, (and to another learner) your print's not here
CML3: It is sir
T: Well then can I see it?

T: (At the end of the lesson) Okay, who still has to hand in prints?
CFL: Me and Charles
T: One print ... (and five minutes later) Okay who hasn't handed in any work yet? Who has not handed in any work? Larry?
CML: No sir

T: Where's your work?
CML: Friday
T: Friday, olraait
CFL: Sir that's not fair
T: Ja but he's gonna get minus 40%! Who else? Who else has not handed in work? Okay. So it's Larry and Cheryl

Two thirds of learners in the class submitted work before the extended deadline, and the remainder, barring a small number, by the latter. The outstanding few handed in prints on the following day without having their grades penalized.

Framing: F -

Pedagogic feature 9b. **Micro-level framing of pacing: pacing within projects** (Data source: transcripts of selected lessons from the observed project; observation notes)

In the observed project five stages were identified: introductory; research; sketching and planning; designing or composing; and carving and printing phases. Two of these were whole-class- and three, individually paced. Whole-class pacing was achieved in the introduction through verbal insistence, for example:

T: Okay listen – first project – (said softly)
BFL: Sht please everyone! (said loudly)
T: I'm just gonna go through this handout with you ... (and, when learners were not listening or engaged in whole-class discussion:) People are talking continually, it's *really* irritating ... (and at the end of the introduction with ten minutes of the lesson remaining) Okay, any other questions? Is that it? (goes to his desk; class socializes for the rest of the lesson)

Whole-class pacing was also created in the sketching and planning stage, by the fact of the whole class leaving the classroom to work outdoors for a specified number of lessons. The teacher did not address the class as a whole save from at the start of these lessons, as follows:

T: Okay come, let's go. Okay listen everybody – listen please – Hey, we don't have time! What we're gonna do –
CFL: Be quiet please! (said loudly)
T: You people could be working on A4 paper, I can give you paper today. I'll give you two sheets of paper and that's all. Olraait? Or I can give you paper for next period. You're gonna be taking a walk around the gardens, looking at monuments and memorials, thinking about, first of all, the site where you're gonna be establishing your monument/memorial. And you're gonna be looking at things here in the gardens, whether it's buildings, statues, whatever, okay? ... So leave your bags here, and go downstairs ... and we'll go (learners go) ...

T: (In subsequent lessons) Okay guys, come! We're going downstairs, let's go. Let's go, let's go, let's go!

When the project progressed to the designing stage, learners worked at their own paces, some continuing to sketch or socialize while others composed, carved, and printed several images. The teacher addressed individual learners in these stages, approaching them with comments like '... show me what you've done ...', only calling the attention of the class as a whole to discuss a class outing, tell them of the project deadline, and a few times asking them to tidy the printing area. At any given moment, learners were at different stages in the project: some slowly sketching two thirds of the way through when others were making first prints; some composing and transferring designs to printing substrates soon after indoor classes resumed, others doing so with a quarter of the lessons to go; some making the first print of a first design while others were carving a third design.

Learners were observed working and socializing during lessons; they were not observed working outside of this, at school or home. Those that were ahead were encouraged to create additional images. Some examples of such comments follow.

(To a learner transferring design to printing substrate)
CFL: Sir I don't wanna do this (learner busy carving design into polypropylene), I wanna do lino
T: Well then, do both
CFL: But sir you don't understand, you know how long I take with these
T: Well then do it – you've started already – do it, and then do a lino too ... (learner does)

(To learners printing in different ways)
T: Use the black-and- white ones too, hey. So you just keep on printing it (indistinct) ... It looks nice in black and white
CFL: But I'm not doing that
T: It makes no difference because you're gonna do it both ways (black-and-white; black, white and grey)
CFL: (indistinct)

And

T: I think you must print a couple black, on white – it works quite well (learner had just made a proof for a design including black, grey and white)
CFL: Oh okay
T: It's very nice just in terms of black and white – you might actually want to leave it like that. But ink it properly so that there's no texture ...

(To learners who had just made successful prints)
T: How'd your print come out? (looks at print) One of those again – two of those!

And

T: Hand that one (completed linocut) in ...
CFL: Must I still do the polypropylene one sir?
T: Yes! Of course!
T: I bet you sir now that I hand these in, the polypropylene's gonna come out olraait ...

In summary, the introduction was whole-class paced, and other phases, apart from brief episodes when the whole-class was addressed, individually paced.

Framing: F -

Pedagogic feature 10a. **Framing of evaluation criteria: extension of learner-selected features** (Data source: transcripts of selected lessons from the observed project)

There were 70 distinct teacher-learner interactions in 90 minutes of the planning and doing phases of the observed project, 28 of which addressed learner selections. In 20 or 71% of the latter the teacher extended learners' selections by adding his own. The remainder were affirmed, clarified, or extended directly on the basis of learners' selections. Examples of whole individual teacher-learner interactions follow.

1. (As teacher and learners walked to a sketching site outside the school)
   CFL: Sir I wanna do how – I mean show how they used to treat people –
   T: Ja – you mean if you use the slave bell down at the – you know next to the cages there, where the birds are ... there's a slave bell there [*teacher extension: teacher adds idea*]
   CFL: What?.
   T: Slave bell. They used to ring that ... to call people to work. So you can maybe use something like that. You could use different kinds of people [*teacher extension continued*] what are you are actually doing here?

2. (When a learner presented a sketched design for approval)
   T: What is that ... [*teacher clarifies learner's rough sketch of a head*]
   BFL: I got this from a book, in a picture

T: Oh, in a picture. But are you making it as though it's carved out of stone? Is it bronze? Is it a sculpture? Is it a flat paper cutout? Is it the real person? And behind him is a statue to himself? What are you actually doing here? What is that supposed to be? [*teacher clarifies learner's rough sketch of a head*]

BFL: I haven't actually thought about it ...

T: ... he could be sitting and posed in a certain way so he looks jolly and happy, like he's laughing ... it's up to you [*teacher extension: teacher adds idea*]. You're actually developing this ... You can ... do like a transition from the past – all the way to his vision of the future over here (shows) behind him [*teacher extension; teacher adds idea*]. Almost like a cartoon bubble, here, actually like framed in a cloud ... [*teacher extension; teacher adds idea*]. You could be making him so he looks like a clown, an idiot, a great man ... [*teacher extension; teacher adds idea*]. You're determining the way this thing's gonna actually read. So you have to think about that. And what is happening in the background ... Because you could write a note – from the book he's written – like framed as a book or perhaps – it's up to you ... [*teacher extension; teacher adds idea*]

3. (When learner shows teacher a design for approval)

CFL: I'm gonna do these lines like here – that way over (shows)

T: Ja [*teacher accepts learner's selection*]

CFL: That's gonna be black, grey, white (shows)

T: Okay [*teacher accepts learner's selection*]

Framing: F +

Pedagogic feature 10b. **Framing of evaluation criteria: elaboration of criteria** (Data source: transcripts of selected lessons from the observed project)

In the introduction to the observed project the teacher outlined evaluation criteria as principles and provided visual referents in the form of known public sculptures. An extract follows. All categorisation follows statements unless otherwise stated.

T: ... the theme of the project – any monument or memorial in the Cape peninsula area ... a monument is anything about survival – it commemorates a person, action, or event, olraait? So it could include things like national monuments ... the Castle ... the Taal Monument ... Cape Dutch architecture ... In Mossel Bay there's a tree, a post-office tree, a tree with a post-office stone ... That has become a national monument as well. So it could be one of a number of things [*specific principle with verbal mention of known visual examples*] ... determine intention and reference, of the structure of your choice. In other words, what is the purpose and what does the structure refer to? That you've chosen to work with. What is its purpose or function ... and what does it refer to, what's the source of reference? Um – what is it symbolic and what is it representative of? Okay? What does it mean? What is it trying to say? ... Does it commemorate something from the past? Or the present? Or something in the future possibly? So if you look at the monument you must actually understand it ... understand what they're about ... [*specific principle preceded by articulation of specific procedures and followed by verbal mention of known visual example*] So that sculpture ... as you're coming towards the avenue, it's on the left outside the cultural history museum, it's of Smuts. Now a particular artist did that sculpture, okay, so you can see his kind of style, and his vision, and his working technique ... and how he's expressing those things through the vehicle of sculpture. And using a particular individual ... that's Jan Smuts, okay. So you're looking at Smuts, and you're seeing something of Smuts' character in that bronze, as well as something of the artist and the way he works. So it's fairly complicated, okay? Just in terms of formally [*principle articulated with verbal mention of known visual example*] ... Okay then there's the thing of social, historical, political significance ... Does it reflect society ... history, politics – there's a combination of those things, whatever. Okay, what's it trying to say, what's its intentions [*specific principle*] ... You may adopt any approach to a theme, okay [*general principle followed by specific procedures and verbal mention of visual examples known to learners*]. You may for example design your own monument to an event ... or you could dedicate it to a person ... from the past or present. Or something even in the future ... Your approach may be

joking, tongue-in-cheek ... serious ... traditionalist ... Non-conformist. You may alter existing structures to suit your own purposes ... The year before last, d'you remember, they played around with some of the monuments here in the Gardens ... For example the one outside parliament ... that equestrian sculpture became a Basotho person with his ... straw hat and blanket ... And very important, the inter-relation between the monument and its environment [*general principle followed by specific procedures*]. Because what you people have to do, is here in the gardens, you can take anything around the peninsula – it can be a Diaz cross for example, Portuguese construction, great ... navigators that go around dropping these crosses all over the show, okay, and you may take that and you may place it here for some reason, next to the Portuguese fish and chips shop ... So you have to choose – a site for your monument or memorial in the gardens here, and it can either harmonise, blend in, or stand out, contrast, or whatever, to the surrounding environment ...

In 91 minutes of the planning/doing phase of the observed project there were 30 individual or group teacher-learner interactions involving evaluation, 25 (83%) of which included clear aesthetic judgements. Examples of these follow.

1. CFL: I found something [a monument to draw] ... It's that lady on top of the fountain ... The catholic lady – I think she's Catholic, I don't know ... So I was thinking of that, with a very destructive and grotesque background
   T: The background being here in the gardens [*specific principle*]
   CFL: The gardens, hey (smiling)
   T: (laughs)
   CFL2: I don't know where you get destructive and grotesque in the gardens
   T: No no no – you can do her in front of the school and you could let the school degenerate into this graffiti-spoilt gang-ridden – [*verbal elaboration of idea*]

2. (To a learner about the background in her design)
   BFL: I wanna make these bars black
   T: ... I think this is such a clichéd boring option ... Do something interesting with these bars [*general procedure followed by specific procedure*] ... imagine you have a picture, and you can cut up the picture, and you can like skew it so it doesn't fit together. So you could actually have it ... you'll see it in these spaces here (between the bars) ...

3. CFL: So how's this [image of sculpture on a post-card] gonna go with this [showing work as she speaks]?
   T: Well, it does. That's a Chinese lantern [referring to flat image learner has drawn]. Okay, so if you include that [referring to image of sculpture on post-card], you're including like an element [*traces shape with his finger on learner's drawing as he recommends specific procedure*] – can you see – it's running into space – you can put that in front of that
   CFL: Sir that's difficult. I need carbon paper
   T: You don't need carbon paper, you need to finalise your design and what you're doing. You need to include that [sculpture image] into that [drawing] [*general principle and procedure*]
   CFL: I don't know how to
   T: Put it [the drawing] on the light box, put this [post-card] down on it, and shift it around a bit and see what happens [*general procedure*]

4. BFL: What must I do at the back here [referring to background in drawn portrait]?
   T: What is that? Are you making it as if it's carved out of stone? Is it bronze? Is it a sculpture? Is it a flat cutout? Is it the real person? And behind him is a statue to himself? What are you actually doing here? What is that supposed to be? [*criteria tacit*]
   BFL: I haven't actually thought about it ... but now say now my background –
   T: He could be sitting posed in a certain way so he looks jolly and happy [*general principle*] ... He looks serious and ... thinking – about what?
   BFL: I dunno ...
   T: About his politics –

BFL: I dunno

T: No but you see it's up to you, you're actually developing this. And things have to go through your mind. You can actually do like a transition from the past – all the way to his vision of the future over here (points on the drawing as he speaks) behind him. Almost like a cartoon bubble, here, actually like framed in a cloud [*general principle and procedure with verbally elaborated idea for subject matter*]

BFL: Mmm

T: You could do something like that. You could do ten thousand things, it's for you to say what ... So when you [are] thinking about it ... actually take those thoughts and put them down on paper and write down – what about, okay, a transition from past to present ... if you were to sit down and write that, that is exactly what would happen. It will be on your mind. And you don't know when the right thing will come to mind. In terms of the way you're feeling in terms of developing what you're trying to say here. What you've done here is a cardboard cutout, okay. Advertising Kentucky Fried Chicken, okay, it's a very nice sculpture – it's a real person with a sculpture behind it. You can't even begin, you're not even beginning to actually confront it and say 'What am I doing? What am I trying to say?' [*general procedures/principle*]

5. T: Remember to put your print upside down ... when you print – it works much better [*specific procedure*]

CFL: Okay

T: I think you must print a couple black, on white [*specific procedure*] – it works quite well [*unqualified approval*]

CFL: Oh okay

T: It's very nice just in terms of black and white – you might actually want to leave it like that [*qualified approval*]. But ink it properly so that there's no texture [*specific procedure*]

In the absence of a summative criticism session, teacher judgements made towards the end of the observed project were analysed. Roughly half of these, some examples of which follow, included clear judgements.

CFL: Sir which one should I take [brings four prints to the teacher]?

T: ... You have to decide [*general procedure*]

CFL: Sir am I going to get a good mark for this [the selected print]?

T: No, print it again ... You must just make sure here – when you look at something like this, okay – you're having areas here that are fairly dark and this is fairly light (pointing on learner's picture as speaks) – and if you compare that with that [referring to dark detailed and light plainer areas respectively], I mean you're over-wiping and you're wiping strangely and there're parts of things disappearing here (points to areas on picture). Here it's not too bad (points on picture) but there're parts you didn't wipe properly (points on picture). You have to look at these prints carefully yourself and think about it, think about which areas work better for you and which areas don't work better for you. And then print it properly. I'm not actually doing anything, you must decide [*general procedures preceded by specific principle and procedures*]

CFL: Okay sir

And

CFL: Sir can I make my sun – leave it there?

T: Ja

CFL: At the top I have black, and then there's grey

T: See you could have like a thin line – that you cut in – almost like a ruled thin line – something like that here (pointing on picture as recommends specific procedure). And you can reduce –

CFL: So it comes thin on top and a lot of black, and then it goes thicker and thicker as it goes to the bottom until right at the bottom, all of it is gone

T: Ja

CFL: Like there's no lino

T: Ja

CFL: But I don't like that

T: Do it in stages when you cut it away [*specific procedure*]
CFL: So if I don't like it, I can still use that other one
T: Ja, you're finished. You're just playing around, you're experimenting [*general principle*]

In summary several criteria were discussed in the introduction, some clearly as principles with verbally elaborated references to visual examples, and some less clearly as general procedures and principles. More than 75% of interactions in 90 minutes of the planning doing stage, and half of interactions near the end of the project included one or more clear teacher judgements.

Classification: F + +

Pedagogic feature 11. **Coding of instructional content** (Data sources: teacher interviews)

The following recounted projects were done in the last two years of secondary school, and are presented below with their complexity gradings.

Recounted project	Complexity Grading
1	2
2	2
3	3
4	3
5	3
6	3
7	3
8	3
9	2
10	2
11	3
12	3

Eight (67%) of twelve projects were complex. Content score '+'